

# THE BUSINESS EDUCATION WORLD



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# The BUSINESS EDUCATION WORLD

Successor to The American Shorthand Teacher

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## CONTENTS

Facts Instead of Deductions.....	<i>Imogene L. Pilcher</i>	271
The Socialized Bookkeeping Course.....	<i>H. A. Andruss</i>	274
Teaching Business Mathematics.....	<i>R. Robert Rosenberg</i>	278
The Story of Shorthand, Chapter IV.....	<i>John Robert Gregg</i>	281
The Efficiency Ratio—A New Typing Yardstick.....	<i>B. Bargen</i>	287
What's on the Next Page in Social Adjustment of Education for Business?.....	<i>Irving R. Garbutt</i>	291
Current Economic Myths.....	<i>Harold F. Clark</i>	293
Business English Needs of the Shorthand Pupil.....	<i>Mary Thorndyke</i>	295
Reexamination of Shorthand Teaching Methods.....	<i>Louis A. Leslie</i>	296
Methods and Devices in Teaching Typing.....	<i>Vernal Carmichael</i>	299
Courses in Practical Economics for Everybody.....	<i>Lloyd Bertschi</i>	302
The Profession of Accountancy.....	<i>Austin H. Carr</i>	305
Idea Exchange.....	<i>Harriet P. Banker</i>	308
Discussion: Irving R. Garbutt, Gertrude Bishop.....		309
Testing the Intelligence of Stenographers.....	<i>Gertrude White</i>	311
Conventions and Conferences.....		312
Office Supplies and Equipment News.....	<i>Archibald Alan Bowle</i>	330
Automatic Review in Gregg Shorthand, Chapter II.....	<i>Clyde Blanchard</i>	331
Commercial Education Research Abstracts.....	<i>E. G. Blackstone</i>	339
Reference Books for Business Teachers.....	<i>Jessie Graham</i>	341
A New Appraisal of Business Education.....	<i>J. O. McKinsey</i>	344
Key to the February Gregg Writer Shorthand Plates.....		345

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GROUP OF BUSINESS EDUCATORS WHO DISCUSSED THE FORMATION OF THE NATIONAL COUNCIL OF BUSINESS EDUCATION AT THE CINCINNATI MEETING OF THE NATIONAL COMMERCIAL TEACHERS FEDERATION, DECEMBER 28, 1933.

*From left to right—Front Row:* Irving R. Garbutt, Clay D. Slinker, Helen Reynolds, Dr. E. J. McNamara, Ray Abrams, Dr. John R. Gregg, Gertrude C. Ford, Albert E. Bullock. *Middle Row:* Dr. E. G. Miller, Dr. E. G. Blackstone, B. Frank Kyker, Jay W. Miller, R. F. Webb, John F. Robinson, Dr. Herbert A. Tonne, Simon J. Jason, James L. Holtsclaw. *Back Row:* Charles G. Reigner, M. E. Studebaker, R. G. Walters, Dr. Gordon F. Cadisch, Paul A. Carlson, Dr. William R. Odell, Paul O. Selby. (Eleanor Skimin, Earl W. Barnhart and John O. Malott also attended this meeting but were not present at the time the photograph was taken.)

# THE BUSINESS EDUCATION WORLD



FAIRCHILD AERIAL SURVEYS, INC., N.Y.C.

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No. 6

## Facts Instead of Deductions

By IMOGENE L. PILCHER

Head of Commercial Department, Lincoln High School, Cleveland, Ohio

**A**GREAT hue and cry has resounded through our schools that we are training too many stenographers. This fallacy found birth in statistics gathered by those lovers of figures who have gained facility in collecting data, but who lack the breadth of vision to see anything beyond the mere numbers at hand.

### The Lost Shorthand Brigade

Does any city-, state-, or nation-wide study of the number of stenographers employed in business offices show the value of shorthand in affording promotional opportunities to those who are not and never have been listed as stenographers on any statistical data? Even the most narrow-minded of our co-workers in the commercial field and the most prejudiced of our academic friends admit that, among

their personal friends, there are many whose initial and promotional opportunities were made possible by stenographic training.

A man holding a professorship at New York University said to me last summer, "After I received my Doctor's degree, I applied for a position at this university. I was told that the department was small, and that only someone trained to assist in the office routine could be considered. The next day I enrolled in a business school, and how I worked on shorthand and typing that hot summer! In the fall, New York University gave me the job."

Do you suppose that any survey of shorthand made by the Federal Office of Education, or for a state study, or a city investigation would ever locate this man? You may reply that his is a rare case. My answer is that such rarity exists in hundreds, yes thousands, of similar cases throughout the country.

### Shorthand Enrollments Increase Despite Councilors

In my own school, the numbers electing shorthand have been constantly increasing, *despite a very rigid advisory system, in which the students are constantly being told that the market is overflowing with stenographers.* The advisers of elective subjects in our school are all academically trained and they are, perhaps, overanxious to believe some figures that have been quoted relative to the uselessness of shorthand.

In order that the parents of our student body might understand clearly that certain teachers believed the students to be wasting their time studying shorthand, our school publication recently carried a front-page article, with a headline intending to convey such information. Can you imagine the disturbance among the august members of our faculty if the school paper published such an article concerning geometry or a foreign language? I doubt if our school is radically different from other large high schools.

Should we condemn these academically trained teachers who are struggling frantically to hang on, as their jobs are slipping through their hands? I think that we can all appreciate their feeling of desperation. Many commercial teachers, however, are permitting cer-

tain surveys to be interpreted erroneously and to go unchallenged. Such teachers are shirking a moral responsibility.

### Why Is There a 32 Per Cent Increase This Year at Lincoln High?

In June, 1933, when the number electing shorthand in our school increased to 620, representing about 150 more students than had been anticipated, it showed clearly that the curriculum guidance in our school was not functioning. A questionnaire was submitted to all shorthand students in an effort to determine their reasons for selecting shorthand in the face of adverse advice from the teacher councilors.

The following table represents information collected from 620 students, who chose shorthand as one of their high school electives:

	Per Cent
Influenced by relatives and friends outside of school who regretted that they did not have shorthand training .....	49
Influenced by relatives and friends outside of school who had found shorthand training of use to them .....	33
Total influenced by relatives and friends outside of school .....	82
Influenced by admiration for a teacher or teachers in commercial department .....	5
Thought subject would be interesting or thought they would like it .....	12
Could give no specific reason .....	1
Total .....	100



FRANK J. SCHOLTES, CHIEF ACCOUNTANT OF THE CLEVELAND TRUST COMPANY, OHIO'S LARGEST BANK, ADVISING WILLIAM SOHLICH, A LINCOLN HIGH SCHOOL STUDENT, TO STUDY SHORTHAND

Do you believe that the 508 persons who influenced 82 per cent of our students to elect shorthand this year are without the knowledge whereof they speak? They are persons outside the schoolroom, who either have met, or are now coping with, the problem of earning a living.

Such persons probably never have read any occupational surveys, but they know the value of shorthand to themselves and to many of their friends who have been given preference, both in securing a position and in promotion on a job, because of their shorthand knowledge. Do you suppose that the thousands who take shorthand and typing in our evening schools are unable to give any good reason for going to night school after a day's work? They can all cite specific incidents in their experiences that lead them to believe that shorthand and typing would assist more than any other tool in aiding them to forge ahead.

Statements from students who are studying shorthand in our school revealed many interesting situations. The following statements are indicative of the general trend:

#### Statements of Shorthand Students

A girl said, "A trained nurse told me that she was given a job as doctor's assistant because she had had commercial training. She said that all girls who expect to go in training ought to take shorthand and typing if they hope to advance beyond the regular bedside duties."

A boy stated, "My cousin will graduate from college next June. Her mother told my mother that they could never have sent her through college if she had not worked in the afternoons and on Saturdays. She works in an office and she got the job because she knew shorthand and typing."

Another boy said, "I want to take a liberal-arts course in college, just as my brother did, but he says that such a course does not provide for business training and that he is glad he got some commercial training before he went to college. He says that I'll have to make contacts on a business footing when I get out."

#### Shorthand in the Small Office

Cases such as those quoted above are not rare nor peculiar to any school or any special section of the country. Such material, however, is not amenable to statistical data, when

the value of shorthand is based upon the number of employees making use of shorthand in business offices that have large numbers of employees. It is characteristic of the survey makers who give their studies such wide publicity that they select firms employing large office forces. The figures immediately take on a voluminous aspect and readers feel powerless and overcome by the size of the numbers quoted.

We all know that in actual numbers of offices there are more small offices than large ones. We know that in the small office there is less specialization of tasks, and an employee must have an all-round commercial training. The process of disintegration going on in big business means, necessarily, a disintegration in large offices. The boy or girl trained in only one specific skill, such as filing or machine operation, cannot fit into the small office needs.

#### The Yonkers High School of Commerce Survey

In the November, 1933, issue of the *Rho Journal*, Cleo Crow<sup>1</sup> reports on a survey made of 321 graduates of a metropolitan district commercial high school. Some of the findings are as follows:

That stenography is the subject most generally used by graduates.

That the opinions of graduates as to the usefulness or uselessness of school subjects showed very few to report the strictly commercial subjects as having been of little or no value. General science and history were checked as being the least helpful, and typewriting, stenography, English, and penmanship were regarded as the most helpful in employment.

This study and the information received by personal interviews with graduates seem to indicate that, for this particular locality, there is a greater demand for stenographic workers and bookkeepers than is shown by accepted vocational surveys.

That about 10 per cent of the boys are going into bookkeeping work or into types of work related to bookkeeping.

#### The Terre Haute Office Survey

During the summer of 1932, Miss Mabel E. Kerr<sup>2</sup> made a survey of the office workers of Terre Haute, Indiana. A daily record of

<sup>1</sup> Cleo Crow, Master's thesis, New York University, 1933.

<sup>2</sup> Mabel E. Kerr, Master's thesis, Indiana State College, 1933.

office duties was kept for one week. The findings revealed that shorthand was used by 46 of the 107 office workers who reported. Miss Kerr's study gives a picture of the small office and is worthy of considerable reflection on the part of those who hitherto have been thinking only in terms of the large office with its standardization and specialization.

#### Advice from Dr. Anna Reed

Dr. Anna Y. Reed, when speaking about the placement of New York University graduates, said, "When a girl comes to me and says that she wants a job in a business office, I say to her, 'What can you do? Can you write shorthand? Can you type?'"

"She is very apt to respond, 'No, but here is my diploma. I have a degree from the University.'

"My reply to this is, 'The business man is not interested in your degree. Go out and get some tools with which you can secure a position, and then come back and see me.'"

He who in this century of progress attempts to guide young people away from the acquisition of the simplest form of writing known to mankind, saddling them for the rest of their lives with that laborious and time-consuming

form of writing known as longhand, is assuming a grave responsibility. Let us, as commercial educators, consider the place of shorthand in the curriculum from every angle, not base our decision solely upon the results of certain statistical reports.

#### Shorthand More than a Vocational Tool

A simple solution, it seems to me, would be to change the objective of the first-year shorthand course from a vocational to a personal-use objective. That shorthand is a personal accomplishment of the highest order and one within the attainment of every person above the level of a moron is an established fact. The increasing enrollment in our shorthand classes is a welcomed sign that the commercial course of study is functioning more efficiently in the economic training of all the youth of this country. Let us recognize this fact in its proper light and transfer our efforts from the fruitless attempt to divert a certain percentage of prospective shorthand students into other subjects to the more useful task of eliminating the wasteful teaching methods in this subject so that the learning time may be reduced and the achievement standards considerably increased.

## The Socialized Bookkeeping Course

By H. A. ANDRUSS

Director, Department of Commerce, State Teachers College,  
Bloomsburg, Pennsylvania

THE future of bookkeeping depends on its reorganization on a socialized basis. The purely vocational objective can be defended no longer. Commercial educators are in general agreement on this point. They agree that, as preparation for adult living, every high school student should have a knowledge of bookkeeping from the consumer's point of view. A one-year bookkeeping course for all commercial students could be justified on the basis of its social values, provided the present course were reorganized to permit the achievement of this objective. A continuation of the study of bookkeeping beyond the first year would be justified solely on the basis of its vocational values to the

few students who are definitely looking ahead to its use in business. All other students would discontinue the subject at the end of the first year.

#### Reorganizing the Subject Matter

The socialized bookkeeping course will contain many of the things taught in the course as it is organized at present. The future cannot break with the present and the past. The skeleton routine of bookkeeping procedure will, however, be clothed with a different raiment.

First of all, traditional first-year bookkeeping must be "devocationalized" and yet

teach principles that will prove sound when applied by vocational students in the second and subsequent years of the course. The first step in devocationlizing will be to delete from the elementary course two topics that today are receiving the larger part of our consideration, namely, (1) record keeping for trading concerns, and (2) the accrual basis of accounting.

This deletion would have the effect of teaching bookkeeping in the first year on a *non-trading cash basis*.

### Record Keeping vs. Bookkeeping

The assumption that bookkeeping is to be applied to business units rendering services, having only income and expenses, would automatically make the teaching of the sales and purchase records unnecessary. The only two original records needed are the general journal and the cash book (or cash receipts journal and cash payments journal). If no goods are handled, no special journals are needed to record transactions that do not occur. Incidentally, the ever-present difficult problem of teaching inventory and purchases adjustments will be obviated.

In like manner, lodges, clubs, churches, and other social, religious, and charitable organizations require the keeping of records. Any citizen may be a member of one or more of these organizations. The type of bookkeeping that we now teach must be "adapted." Students who have been taught in terms of keeping records for a store that buys and sells goods are not easily made to realize that the operating statement for a non-profit organization will contain only two sections—Income, from which will be subtracted the Expenses, so as to arrive at net income, *not net profit*.

If only the cash basis of accounting is necessary to the consumer citizen, we shall not teach adjusting entries, work sheets, and reversing entries. The net effect of deleting trading accounts and adjusting entries as a device for reflecting future income and expenses will mean that we shall teach bookkeeping that will enable a citizen to operate a family budget successfully, and make out his own Federal income tax return.

Not only shall we be able to teach more bookkeeping procedure of a usable nature, but we shall be able to teach bookkeeping methods that stenographers, secretaries, and clerks in small offices may apply in keeping

the records of architects, doctors, lawyers, dentists, and realtors. These general clerks answer the telephone, receive visitors, and keep simple records. They do not make financial statements, close the books, or make adjusting entries. In traditional bookkeeping courses, little or no attention is paid to the method of keeping records for professional men who render services, but who sell no goods.

A family budget is an estimate of expenses and income for a year or a part of a year, generally based upon the memory of the individual making the budget. The budget is not an unyielding limitation to the expenditure of money for those things not properly estimated in it or that have been omitted. The family budget is a plan, an estimate, a good guess, a hope, and not a fixed device for arbitrarily limiting the expenditure of income. The actual expense of any family might well be recorded in a cash book, the results being transferred to the actual amount column provided in the budget so that variations (increases or decreases) may be recorded.

Bookkeeping that enables one properly to handle the common business papers, such as checks, notes, drafts, sales tickets, light, gas, water, and telephone bills, will function to better advantage, and be of greater value to the average citizen, than will bookkeeping taught in terms of buying and selling goods, and the making of adjusting entries.

If we ever are to have the subject of bookkeeping socialized, we must not expect to force the vocational subject matter of present-day bookkeeping down the throats of those students who do not expect to keep records for a business. Bookkeeping must be adapted, not adopted. The citizens of today are interested in the records found in the small office of a professional man, in the home, or in the social group, if they happen to be elected the record-keeping officer of that group.

### A Suggested Socialized Bookkeeping Course

Since successful experiments sometimes result from a challenge, might not a guess be hazarded as to the content of a socialized course in bookkeeping? Out of a group of 370 commercial teachers answering the questionnaire appearing in the December, 1932, issue of the *Balance Sheet*, the answers to the question, "What do you feel should be included

in an ideal bookkeeping text?" may be analyzed as follows:<sup>1</sup>

*Choices*

1. Personal record keeping (including household record keeping) ..... 323
2. Record keeping for organizations, such as churches, clubs, etc. ..... 227
3. Record keeping for professional men ..... 211
4. Record keeping for the farmer ..... 209
5. Record keeping for political subdivisions, as cities and counties ..... 130



H. A. ANDRUSS

When such a large number of commercial teachers expect an ideal textbook to contain the above material, it is significant; it is doubly significant since present-day textbooks have not been organized so as to treat any of these most frequently mentioned types of record keeping.

On the basis of the result of this questionnaire, a suggested outline of units to be included in first-year bookkeeping is here given to provoke further productive discussion.

This course, one year in length, may be offered to all students on the basis of its future usefulness in life. It is a terminal course for academic students and a prerequisite or introductory course for those people who wish to study vocational bookkeeping, either for the sake of general business training or for the sake of becoming a bookkeeper or a business worker in the future.

<sup>1</sup>Monograph 19, South-Western Publishing Company, Cincinnati, Ohio, p. 34.

**Outline of New Course**

- I. First Bookkeeping cycle (instructional time, eight weeks) :
  - A. Property, property rights, and claims against property.
  - B. Business equation in terms of "Own Minus Owe equals Net Worth."
  - C. Balance sheet in terms of assets, liabilities, and net worth.
  - D. Source of changes in net worth :
    1. Income.
    2. Expense.
  - E. Statement of income and expense. (This is similar to the profit and loss statement, except that it does not contain cost of goods sold, since trading accounts are not treated.)
  - F. The T-account as a bookkeeping device.
  - G. The standard account related to :
    1. Balance sheet.
    2. Statement of income and expense.
  - H. Daily business records :
    1. Diary or day book.
    2. Two-column journal.
  - I. Posting through ledger and trial balance.
  - J. Making statements from trial balance :
    1. Balance sheet.
    2. Statement of income and expense.
  - K. Closing all income and expense accounts by transferring them directly into an income and expense summary account.
  - L. Application of principles in a connected routine of not less than thirty or more than fifty transactions. (This is similar to the modern practice set using a two-column journal and ledger.)
- II. Second Bookkeeping cycle (instructional time, eight weeks) :
  - A. Charge accounts.
  - B. Written promises to pay :
    1. Notes Receivable account and Notes Payable account.
    2. Study of notes as business papers.
  - C. Common business papers, such as :
    1. Bills.
    2. Statements of account.
    3. Sales tickets.
    4. Checks.
    5. Notes.
    6. Drafts.
    7. Light, telephone, and gas bills, etc.
  - D. Interest and discount :
    1. Interest and bank discount.
    2. Merchandise discounts for quantity buying :
      - a. Trade discounts.
      - b. Merchandise cash discounts for prompt payment.
      - c. Penalties for late payment.
    - E. Cash records, the first of which journal would probably be the two-page cash book.

F. The application of principles learned in this cycle with the common papers using :

1. General journal.
2. Cash book.
3. Ledger having not more than fifty transactions.

III. Personal and family record keeping (instructional time, six weeks) :

- A. Estimate of income and expenses.
- B. The family or personal budget.
- C. Family or personal records needed to operate a budget :

  1. Cash book.
  2. Check book.
  3. Simple box or metal files.

- D. Relation of cash book to actual amount column in the budget.
- E. Individual income tax return.
- F. Application of principles using :

  1. Family budget :

    - a. Estimated and actual income.
    - b. Estimated and actual expense.

  2. Cash book as a source of actual figures.
  3. Ledger kept on cards.
  4. Income tax return.

IV. Record keeping for social organizations, as clubs, lodges, and societies (instructional time, five weeks) :

- A. Source of income—dues, gifts, assessments.
- B. Administration of expenses.
- C. The organization budget.
- D. Recording of actual income and expenses in cash book.
- E. Closing books at the end of the year.
- F. Fiscal budget reports.
- G. Application of principles similar to that in the second bookkeeping cycle.

V. Record keeping either for professional men, in urban schools; or for farmers, in rural schools (instructional time, five weeks). This unit will vary according to the nature of the school in which it is taught. Probably the general journal, cash book, and ledger will be the backbone of the records kept.)

#### Articulation of Social and Vocational Bookkeeping

To give citizens in everyday life an appreciation of the habits of record keeping is the chief objective of a first course in bookkeeping. It is not the only objective, however. We might well ask the question: What would be taught in second-year bookkeeping if the first year is devoted to record keeping for the consumers in society?

It would be necessary to teach the following units in second-year bookkeeping:

I. Accounting for a trading business :

- A. Merchandise vouchers.
- B. Merchandise accounts :

  1. Sales, sales returns, and sales allowances.
  2. Purchases, purchases returns, etc.
  3. Inventories.
  4. Sales and purchases discounts.

- C. Special journals—sales journals and purchases journals.
- D. Work sheet.
- E. Financial statements :

  1. Classified balance sheet.
  2. Statement of profit and loss.

- F. Adjusting and closing entries.

II. Accrual basis of accounting :

- A. Deferred items on the balance sheet :

  1. Deferred charges to expense.
  2. Deferred credits to income.

- B. Accrued items on the balance sheet :

  1. Accrued assets.
  2. Accrued liabilities.

- C. Financial statements :

  1. Classified balance sheet.
  2. Statement of profit and loss.

- D. Adjusting entries.
- E. Closing entries.

At this point controlling accounts might be followed with the material as it is now organized and taught in bookkeeping courses.

No consideration is given in this discussion to other improvements that are needed in the selection of the material for present-day bookkeeping courses. It is the hope of the writer, however, that this definite course plan for socialized bookkeeping will provoke discussion until publishers and teachers alike realize the necessity for and possibilities of a one-year course that may be offered to all high school students regardless of their future vocation.

Traditional bookkeeping is appealing less and less to high school students of both the commercial and non-commercial groups. The needs of these two groups are different. The continuance of the present-day importance of bookkeeping depends on the ability of commercial educators to organize a non-technical simplified course in bookkeeping for all high school students.

*Note:* Mr. Andruss' paper will be discussed in the March issue. If you are experimenting with a new type of bookkeeping course based on the socialized approach, we shall appreciate a letter from you describing your experiment.—*Ed.*

# Teaching Business Mathematics

By R. ROBERT ROSENBERG, C.P.A.

Dickinson High School, Jersey City, N. J.

*The change that is definitely taking place in the presentation of the subject of bookkeeping, particularly the use of shorter sets and less figuring, is reducing the amount of business mathematics heretofore taught in the bookkeeping class. This reduction places a greater responsibility upon the teacher of business mathematics to see that his job is exceptionally well done.*

*Mr. Rosenberg was asked to discuss the teaching of business mathematics because he possesses the qualifications of a successful teacher of this subject: a thorough mastery of subject matter, practical experience in the use of mathematics in the business world, adequate pedagogic training, a desire to teach the subject, and a winning personality.*

**B**USINESS mathematics, in this age of industrial and commercial specialization, takes its place in the front ranks of the more important commercial subjects taught on the secondary-school level, because it aids the student to adjust himself to his environment. It is an essential tool of commerce and will continue to be taught with increasing emphasis in commercial and other curricula.

It is not the purpose of the writer to present a treatise on Business Mathematics, but rather to attempt to answer some questions of a general character that may be of interest to teachers of the subject. So that a greater range of topics may be covered, the question-and-answer method of discussion is followed.

*What should be the immediate aims of business mathematics?*

To develop speed and accuracy in the fundamental processes in handling the integers and fractions most used in business; to develop higher standards of accuracy, speed, systematic procedure, and neatness; to place emphasis on dexterity in mental computations rather than on the form of written solution; to develop the relatively few short cuts that are of practical value in rapid calculation; to train in problem reading, interpretation, and solving; to train in estimating the reasonableness of an answer; to develop the topics and subjects that are truly vocational in character, of greatest interest and use to students, and necessary for a clear understanding of other topics and subjects.

*What topics should be included as the minimum essentials in the subject matter of a course in business mathematics?*

An intensive course consisting of:

Systems of notation	Commission and brokerage
Fundamental operations	Bankers', accurate, and compound interest
Factoring	Bank discount on notes and drafts
Fractions	Taxes: property, income
Aliquot parts	Insurance: workman's compensation, fire, life
Pay rolls	Stocks and bonds
Denominate numbers	Graphs
Principles of percentage	Building and loan
Trade and cash discount	Installment buying
Profit and loss	
Marked price	

*What instructional methods should be emphasized in the training of every teacher of business mathematics?*

Methods of learning, of teaching, and of drill in the fundamentals; the technique of problem solving, both oral and written; the method of interpreting and applying the results of scientific investigations; methods of diagnosing and providing remedial treatment; and methods of furnishing proper motivation of the learning activity in arithmetic.

*What are some of the factors primarily responsible for pupil achievement in business mathematics?*

The techniques of instruction used by the teacher and the skill of the teacher in applying these techniques; the zeal and person-

ability of the teacher; the materials of instruction used; and the time devoted to learning activity.

*Will systematic drill or incidental instruction be productive of greater efficiency in calculation?*

It has been borne out repeatedly by studies made by such men as J. C. Brown, M. A. Kerr, F. M. Phillips, J. H. Smith, and others that systematic drill is superior to incidental instruction in developing proficiency in performing arithmetical calculations. This is especially true when the drill is conducted in a way that stimulates the student's desire to increased achievement.

*What type of drill material will best develop arithmetical ability in the field of calculation?*

The most effective practice material is that written by experts who have carefully prepared the learning exercises in which none of the number combinations are omitted and in which the more difficult combinations occur with greater frequency. The addition, subtraction, multiplication, and division operations should, in the initial stages of learning, be practiced separately, especially if the objective is accuracy. When the desired objective of the learning exercises is the improvement or maintenance of both accuracy and speed, the operations should be mixed in character.

*How much time should be devoted during each class period to fundamental operations?*

Until mastery of the fundamentals has been attained, practice periods of about twenty minutes should be devoted daily to these operations. After this mastery has been attained, a ten-minute accuracy and speed drill, checked by the students, should be made part of every recitation period.

*What difficulties do students encounter in solving oral or reasoning problems?*

Most of the difficulties encountered by students in solving this type of problem are difficulties in understanding the terminology in which the problems are phrased. They cannot grasp the relations that exist among the various parts of the problem. Scientifically conducted investigations have shown that, where these difficulties in reading and in reading comprehension have been removed,

a decided improvement has been noted in problem solving.



R. ROBERT ROSENBERG

*What method of teaching students to solve oral or reasoning problems in arithmetic is most effective?*

In general, three methods are used to teach students how to solve oral problems:

The use of a large number of problems with no special technique.

The use of analysis as a definite technique in attacking problems.

The use of analogy, or training pupils to see the similarity between difficult and easy problems and so to decide what process to use in solving the difficult problems.

For many teachers, the first seems to be the most effective method. This contention is borne out in the article by Washburne and Osborne entitled "Solving Arithmetic Problems," which appeared in the *Elementary School Journal* for November and December, 1926. It may appear to some, however, that the effectiveness of any method of teaching students to solve reasoning problems in practice depends greatly on the skill, training, and zeal of the teachers using it and on the determination of the pupils to solve them.

*What is the place of diagnosis and remedial instruction in business mathematics?*

By discovering the specific disabilities of students by means of diagnostic arithmetic

tests and by adapting remedial instruction to the needs of these students, much improvement in the ability of students to reason in arithmetic has resulted. Individual instruction with the aid of prepared practice materials on points of weakness revealed by diagnostic tests has been found to be more effective than class drill. Diagnostic tests are also used to measure achievement, in addition to their use as teaching and learning instruments.

*What should be the purposes of tests in the teaching program of business mathematics?*

Tests should enable a student to find his weaknesses; should serve as a review of work already covered, should enable the teacher to determine if the aims of the course are being attained; to find where remedial instruction is necessary, and to determine pupil achievement.

*What should be the place of reviews and drills in the teaching of business mathematics?*

Investigations by psychologists have revealed that the rate of forgetting is so rapid that only by the use of frequent reviews and drills can arithmetical processes already learned be retained. A brief review or drill on subject matter covered should be part of every class period in business mathematics.

There is a tendency on the part of authors of current arithmetic textbooks to give prominence to timed drills, reviews, and tests.

*What should be the function and the main characteristics of a review lesson?*

This type of lesson should assemble the principles and facts covered in a series of recitation lessons, should organize these principles and facts into larger systems and thought connections, and should provide the necessary drill that is essential to retention. In this way, emphasis will be placed on the connections that hold the various parts of the subject matter together rather than on the sections of the topic covered in the individual lessons.

A review lesson calls attention to the essentials only, presents these essentials from a new aspect, deepens the thought processes, and gives a more thorough grasp of the topic. It should be given not only at the end of the

course but also at the end of any important point or topic.

*How may success for all students in a group in business mathematics be made possible?*

The mastery of the fundamental operations should be made the primary aim of all students; independent activity on the part of the students should be made possible; reviews and drill exercises should be provided; new principles should be presented, and any difficulties cleared up during the class period; all results should be checked and proved at all times; and minimum essentials and supplementary exercises should be provided for the different capacities of the students.

• • •

## Supervision Needed

**A** CERTAIN typing teacher was repeatedly cited by her principal as being exceptionally efficient. This teacher was prompt, alert, and a good disciplinarian. She put an abundance of drive into her teaching. The work done by her pupils was faulty, however, and their errors were of all sorts that would be offensive in any office where superior work is done.

A standard test was given throughout the system, and the papers, after being checked by the teacher, were reviewed at headquarters, where it was discovered that this particular teacher had found only about 50 per cent of the errors and other defects that should have been criticized.

Through her general appearance of efficiency, she had convinced her principal that she was most capable, when, as a matter of fact, she was one of the weakest teachers in the system, when results obtained were measured in terms of the objectives set up for the teaching of the subject. Thus, the supervisor is able to secure specific performances throughout the system, correcting the inequalities that might otherwise continue to exist under leadership of various high school principals, who, in ignorance of the true objectives, so often judge teachers upon personality and general appearances and thus erroneously rank them. To raise the work of the pupils in the department to points above the mediocre, it is necessary that the teacher's ideals be raised to levels above mediocrity.—*Clay D. Slinker, Director of Business Education, Des Moines.*

# The Story of Shorthand

By JOHN ROBERT GREGG, S.C.D.

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## Chapter IV

### TIRO'S SYSTEM: ITS ORIGIN, RISE, AND DECLINE

#### I

ONE of the most interesting of all studies is the history of the most useful art known to man—the art of writing—and there is a very intimate connection between the development of the ordinary forms of writing and that of the briefer form of writing called shorthand. The processes that have affected the development of one have had their influences on the other. Everyone is familiar, in a general way, at least, with the story of the evolution of writing from rude pictographs, but the fact is not so generally recognized that the material on which the writing was done at various periods has determined the forms of the letters and also the nature of the tools used for writing.

The square Roman capitals were so admirably adapted for chiseling on monuments that they have remained practically unchanged for that purpose to this day. When the wax tablet became popular for writing, the steel-pointed stylus came into use, and the clinging wax surface naturally favored a broken or disconnected style of writing. With the introduction from Egypt of papyrus (from which we get our word "paper") about the beginning of the Christian Era, a softer instrument than the stylus was needed, and the reed was adopted. Afterward parchment came into use through the discovery of a method by which both sides of a skin could be used, and the soft reed gave way to a firmer instrument with a broad point.

Centuries later came paper, and the quill. The flexibility of the quill speedily developed a greater and more graceful curvature to the letters and connecting strokes, as well as a tendency to indulge in ornate shading of letters. The invention of engraving in the fifteenth century gave an impetus to the adoption of a connected style of writing, because of the difficulty experienced by engravers in lifting their fine engraving tools from the letters and replacing them with such precision that there would be no blemishes by scratches, dots, or broken lines. As the steel pen, which came into use early in the nineteenth century, grew in popularity, and the need of a more rapid style of writing for business use made itself felt, the ornate shading and flourishing was dropped in favor of a light-line writing with simpler forms.

Obviously, all these factors had their influence on the evolution of shorthand writing, quite as much as they had on the longer style of writing.

#### 2

The origin of the Tironian *notæ* is largely a matter of conjecture. Some historians maintain that the system was an absolutely original creation. This

may be true; but from the very nature of the characters used, this writer is inclined to believe that, like almost everything else, the Tironian notes were the outcome of a process of evolution. As noted in Chapter I, the art was in general use by the Greeks and Egyptians, from whom the Romans derived a great deal of their art, philosophy, literature, and inventions. During the period of their greatest power, the Romans were very eclectic in their selection and adaptation of the best ideas to be found in all the known world. The real history of shorthand begins with the Tironian *notæ*, simply because we have more knowledge of Tiro's invention than of any preceding system, and also because it contributed more definitely to the preservation of philosophy, religion, and history than any other brief form of writing in ancient times.

The famous grammarian, Marcus Valerius Probus, who lived in the time of Nero, has left on record the information that before the advent of the Tironian *notæ* it was the practice of many people, and particularly the members of the Senate, to make brief notes of speeches by indicating certain words and names by their initial letters only; for example, P.R.E. for *post regis exactos*. These abbreviations, which gradually developed into a regular code, were called *singulæ literæ siglæ*. From this grew up the custom of indicating common Latin phrases by initials, which was much practiced by the Romans, especially on their urns and funeral decorations.



*Singulæ Literæ Siglæ IN THE MAKING*

## 3

The alphabet of Tiro given on page 284 shows that the characters for most of the letters were derived from the majuscules, or capital letters, of Latin, which survived in carefully engrossed manuscripts down to the ninth century. Incidentally, the resemblance between the characters of Tiro's alphabet and the Latin capitals of his time was closer than at a later period. The letter *L*, for example, was then written with the last stroke canted upward, as in Tiro's alphabet, instead of in a horizontal direction. The minuscule form of writing, consisting of small letters that could be joined to one another without lifting the pen, did not come into general use until the ninth century. Since the capital letters of Latin, on which Tiro's alphabet was founded, were composed of lines and curves written in all directions, as are our *printed* capital letters of today, the Tironian notes embodied these characteristics.

## 4

Such being the facts, it seems probable that the successive steps in the development of the first Latin system of shorthand writing of which we have any knowledge were these: first, the use of initial letters as abbreviations for words and names, as described by Probus; second, the extension of these abbreviations by Quintus Ennius into a code of eleven hundred signs, possibly through the simplification or modification of the forms for some of the majuscules; third, the extension of the work of Quintus Ennius by Tiro, by the formulation of a complete alphabet of characters based on the Latin majuscules, so simplified or modified in structure that the notes assumed the appearance of character writing, although still retaining, in many instances, the general forms of the original majuscules.

## 5

The plan of using the initial letters to express words and names was adopted in the shorthand notes for reporting court proceedings, political debates, and ecclesiastical conferences. In order to economize time and effort, the reporters also began to use these abbreviations more and more in making their transcripts. Ultimately, this was carried to such an extent that the transcripts were almost unintelligible to those who had no knowledge of the code of abbreviations. There were so many complaints about this practice that in the sixth century the Emperor Justinian forbade the writing of his famous codes of law "in the catches and short-cut riddles of signs."

The custom of expressing Latin phrases by initials has been handed down to the present day, and many people make use of these abbreviations in ordinary writing without giving a thought to the origin of them; thus: e.g. (*exempli gratia*); A.D. (*Anno Domini*); A.M. (*ante meridiem*); P.M. (*post meridiem*); N.B. (*nota bene*); R.I.P. (*Requiescat in pace*); M.D. (*Medicine Doctor*); LL.B. (*Legum Baccalaureus*); L.S.D. (*Libræ Solidi, Denarii*); I.H.S. (*Iesus—or Jesus—Hominum Salvator*); D.V. (*Deo volente*); P.S. (*post scriptum*).

## 6

So far as the writer knows, no one has heretofore directed attention to the interesting fact that many of the characters used by the early English shorthand authors were derived from those of Tiro, and that, in a simplified form, some of them are in use even today in many English, French, and Spanish systems for the very purpose they served nearly twenty centuries ago! In a later chapter, dealing with the revival of shorthand in modern times, evidence will be given of the far-reaching influence of the Tironian *notæ* on shorthand construction.

## 7

The Tironian alphabet was supplemented by dots and dashes and arbitrary marks of various kinds placed above, below, or alongside a character, and by ingenious methods of varying the inclinations of a consonant in three different directions to indicate the vowel that followed the consonant. This method of "vowel indication" was adopted by many systems in the seventeenth and eighteenth centuries, and by one or two systems in the nineteenth century.

The distinguished scholar, Ulrich Frederick Kopp, in his great contribution to the literature and history of paleography,\* gives a minute and painstaking analysis of the Tironian *notæ*, showing the uses of the characters for the alphabet and their various modifications. A brief explanation of the use of the characters for the first few letters of the alphabet and some specimens of the connected writing will be sufficient to give an idea of the methods adopted to make the first shorthand system of practical service to its users.

A	^	h	M	~
B	3		N	Z N
C	( )		O	o —
D	75		P	^ < - 1
E	- 667		Q	a. 9
F	^ /		R	1 P
G	5		S	5
H	V		T	7
I	I		V	V
K	K		X	X
L	L		Z	4 4

TIRONIAN ALPHABET

— — — \* "Paleographica Critica," Mannheim, 1817-1829 (4 volumes).

As will be seen from the alphabet, the letter *a* was represented by two forms. The first *a* was used as follows:



alius



alienus



avium



attonitus



Andron

With the second *a*, the writing of it alone signified the *a*, and with the addition of dots or points in certain positions, other words were expressed:



arbiter



amicus



ager



animus

When joined to other letters, the compound sign for *a* was modified. When the first sign for *a* was cut down to the second stroke only (the back-slope character), it expressed *ab*; when the first stroke of the *a* only was used, it expressed *ac\**; thus:


a (b) coit  
(abbreviation  
for abscondit)

acm (a)  
(abbreviation  
for acroma)

The letter *e* at the end of words was expressed as in the following:



be



ce



re



pe



ue



benignus



bibit


a(r)b  
(arbor)

a(r)bv(m)  
(arbustivum)

When preceded by *ar*, the *b* is written as shown at the left.

The letter *c* looks familiar. With the addition of the dot and dash it expressed:



ceterum



campus



redit

In an article in the *Phonographic World*, New York (April, 1896), Mr. N. P. Heffley, after giving a specimen of Roman shorthand notes, directed attention to the fact that many of the words were joined (*in unum*, *in montem*, *in sæculum*), which proved that the art of phrase writing in shorthand—generally considered a modern discovery—was used in ancient times.

\*The sign for *ac* is the same as that used for *ac* in the Gurney system in the twentieth century.

(To be continued)

## Editorial Comment

**G**ENERAL BUSINESS EDUCATION for the consumer is a definite and, for the majority of us, an acceptable subject with which to start the "commercial" course of study. It places the social objective ahead of the vocational objective. It affords everyone in school an opportunity to receive a thorough understanding of elementary business principles, customs, and practices as they function in the life of the consumer. It in no way delays the development of those who are vocationally inclined. There is nothing to unlearn in the specialized courses that follow. Gratifying progress is being made in the organization and introduction of a course of this nature.

### Bookkeeping Reorganized

A second step is also under way, forced upon us by the results of the first—the content and objectives of the elementary bookkeeping course must be revised in such a way as to continue in a logical manner the business education foundation laid in the general course immediately preceding it.

Several business educators have been working on this needed reorganization of elementary bookkeeping, and before another school year opens it is hoped that their efforts will be translated into practical results. On page 274 of this issue Mr. Andruss outlines the content of a bookkeeping course reorganized on a socialized basis.

### Immersed in Reality

**W**OULDN'T it be a good idea for each teacher to list the daily, weekly, and monthly contacts that he himself has with the business men and women who employ the type of worker he is training and with those employees themselves who are engaged in the type of work he is teaching?

We grant it is a difficult problem for the busy teacher to devise a practical plan of maintaining these essential business contacts. The problem must be solved, however, by each teacher, and in the way best suited to his own situation. The realities of business must be brought into every business classroom.

We urge those of you who have found a solution to this problem to pass on your plans

to the rest of us, through the columns of the *Business Education World*. You will be performing a valuable service to the profession.

### Forthcoming Features

**W**ILL HAYS, the czar of the motion picture industry, has promised us an exclusive interview for an early issue. What has the motion picture to contribute to the teaching of business subjects? Mr. Hays will tell us.

As an interesting sequel to "Whither Goeth Radio," which appeared in the January issue, Dr. Blackstone has a story to tell you under the heading, "Shorthand by Television."

Professor E. L. Kelley, of the Northwest Missouri State Teachers College, is writing at our request a series of five articles on business law. This series will not be of the usual type. It will be just as interesting and informative to the average citizen as to the teacher of business law. The title of Mr. Kelley's first article is "Legal Aspects of the Business Man's Relation to His Market."

Do you disagree with certain educational authorities in the matter of teaching, or rather not teaching, penmanship above the eighth grade? Whether you do or not, we want you to be sure to read the article we are publishing on this subject by W. S. Barnhart, of Indianapolis.

We all agree that guidance is an essential part of our educational program. Every student would benefit from the sane advice of a properly trained and experienced counselor. The *Business Education World* is arranging to run descriptions of some actual guidance cases as they were handled by our leading counselors. This is the most concrete way we can think of to bring to you what is being done in guidance in the field of commercial education. Each case will be fully annotated so that the reader may see clearly the application of the guidance principles involved. Dr. Elmer E. Spanabel, veteran counselor for the Fifth Avenue High School of Pittsburgh, Pennsylvania, a school of some 10,000 day and 5,000 evening students, will lead off in this practical vocational guidance series.

And thus the offerings of the *Business Education World*, your professional magazine, grow richer.

# The Efficiency Ratio—A New Typing Yardstick

By BERNHARD BARGEN

Oxford, Kansas

Introduction by Harold H. Smith

**O**PENING our daily mail has become more and more of an adventure—we have acquired the habit of expecting a stimulating mental prod. Mr. Bargen has furnished many of these prods. Teaching a number of commercial subjects in a rural high school, he still finds time to think through some of his problems and to do a limited amount of well-directed experimentation.

Several months ago Mr. Bargen told us of his efforts to measure the relative performance of typists on diversified assignments. As many teachers have discovered, the fast copyist is not, necessarily, the most efficient on practical business typing. In a letter to us, Mr. Bargen says:

The excellent record made by some of my slow typing pupils in the efficiency tests I have been giving has been provocative of much thought on the part of my rapid typists, who now see clearly that training for a day's work under actual office conditions is something that has never really focalized in their consciousness.

It has been increasingly evident since the annual International Typewriting Contests lapsed that teachers are anxious to measure practical as well as basic typing skills. They are especially interested in a more scientific method of penalizing inaccuracy.

In general, teachers are seeking definite standards, constants that may be applied by rule of thumb in classroom measurement. It is so easy to forget that the work of the typist consists of a succession of variables over a tremendous range. Efficiency engineers have long since recognized the impossibility of setting definite and fair standards that would apply to all transcription and typing. They agree that the most that can be done is to fix standards for each particular job situation.

Notwithstanding these serious limitations, it is, obviously, of the greatest importance to discover, if we can, how much basic skill a typist must have in order to produce, efficiently, various kinds of practical business papers, such as letters, tabulations, and legal work. We ought to have also a more definite

idea as to how rapidly and accurately each kind of practical typing should be produced. To continue measuring, as we now do, solely on the basis of accuracy and arrangement is ridiculous. Business must have both quantity *and* quality.



BERNHARD BARGEN

Some method of determining fair standards of quantity and quality must also be set up before we can even begin to compare the efficiency of various techniques of planning and executing practical work, thus putting many of our pet teaching theories through the acid test of performance.

Mr. Bargen has been experimenting with an efficiency test in the hope that he might evolve a dependable measure of practical typing ability. In his experiment, he has closely followed our suggestions for determining the average gross stroking capacity of each student on straight copy for a 30-minute period. Being limited as to time, he concentrated on tabulations as the form of practical typing to be measured. We quote portions of his letter reporting on his experiments.

## Mr. Bargen's Letter

Dear Mr. Smith:

Last spring you asked me to write you more fully about my experience with the efficiency test. I soon realized that, if I was to report anything worth while, it would be necessary for me to limit myself to one field; that is, the time was too short to attempt to arrive at definite results in letter writing, tabulation, rough draft, manuscript, etc. I therefore selected tabulation, and I am sending you some data showing the efficiency ratios of my students in that field.

You suggested that I make the basic copying test 30 minutes in length, which I did. I planned a series of tests of varying degrees of difficulty: Series A, elementary; Series B, fairly difficult; Series C, advanced. Each series was to consist of one test each of tabulation, letter writing, rough-draft manuscript, and form (legal) work. These tests were to be numbered A-1, A-2, A-3, A-4; B-1, B-2, B-3, B-4; etc. I have worked out tentatively tests A-1 and B-1, which are tabulations, and which I am enclosing. The data I shall discuss, however, concerns only B-1.

For a 30-minute straight copying test I selected the "C" exercises and the intensive drills in "Gregg Typing," complete course. It may be argued that breaking a test into such small exercises does not provide a fair basis of comparison. I thought, however, that this arrangement would break up the attention-span a little for the students, and supply natural breaks in the basic copying test similar to those in the efficiency test.

## Explanation of Columns in Table 1

Column 2 represents the average number of strokes written on three 30-minute tests. This number represents gross strokes written without any deductions for errors.

Column 3 is merely informational, to show about what rate of speed that number of strokes represents.

Column 4 represents the actual number of strokes written during the efficiency test.

Column 4  $\div$  Column 2 = Column 5, the gross efficiency ratio.

Column 7, "% Deduction per Error," represents a deduction for each error which is equivalent to 1 per cent of the quantity written in the tabulation test. Thus, Pupil No. 1 wrote 598 strokes, or 119.8 standard words. A penalty of 1 per cent would, therefore,

allow him to miss 1.1 words. Since only one error per word should be counted, we may say 1.1 words equal 1 per cent. Solving for the value of 1 word error, we have the formula,  $0.01 \div 1.1$ , which equals 0.009, or 0.9 per cent as shown in Table 1.

Again, Pupil No. 13 wrote 285 strokes, or 57 standard words. A penalty of 1 per cent would, therefore, allow him to miss 0.57 words. Since only one error per word may be counted, we may say 0.57 words = 1 per cent. Solving for the value of 1 word error, we have the formula,  $0.01 \div 0.57$ , which equals 0.018, or 1.8 per cent.

TABLE 1. TABULATION EFFICIENCY OF CLASS

1	2	3	4	5	6	7	8	COLUMNS	
								30-Minute Straight-Copy Test	% Net Efficiency (Net Efficiency Ratio)
Pupil Number	Total Strokes Written	Average Number of Gross Words per Minute	Number of Strokes Written in Efficiency Test	% Gross Efficiency	Number of Errors in Efficiency Test	% Deduction per Error	Total % Deduction for Errors		
1	4,290	28	598	14	7	0.9	6.3	7.7	
2	5,743	38	985	17	13	0.6	7.8	9.2	
3	5,391	35	708	13	2	0.7	1.4	11.6	
4	6,947	46	615	9	5	0.8	4.0	5.0	
5	5,233	34	468	10	6	1.1	6.6	2.3	
6	4,679	31	355	10	4	1.4	5.6	2.4	
7	7,062	47	772	11	12	0.7	8.4	2.6	
8	5,216	34	506	9	2	1.0	2.0	7.0	
9	5,257	35	832	16	11	0.6	6.6	9.4	
10	5,142	34	708	14	2	0.7	1.4	12.6	
11	5,409	36	371	7	3	1.4	4.2	2.8	
12	4,036	26	327	7	3	1.7	5.1	1.9	
13	8,247	55	285	3	6	2.0	12.0	-9.0	
14	4,980	33	708	14	13	0.7	9.1	4.9	
15	5,776	38	708	12	5	0.7	3.5	8.5	
16	6,842	45	708	10	9	0.7	6.3	3.7	
17	5,774	38	371	7	3	1.4	4.2	2.8	
18	6,799	45	642	9	7	0.8	5.6	3.4	
19	6,257	40	826	13	2	0.6	1.2	11.8	
20	6,397	42	708	11	3	0.7	2.1	8.9	
21	7,027	46	985	14	22	0.6	13.2	0.8	
22	5,720	38	708	12	6	0.7	4.2	7.8	

## How to Read Table 1

Read Table 1 as follows: Pupil No. 1, who on straight-copy work writes an average of 4,290 strokes in 30 minutes, or 28 words per minute, wrote only 598 strokes in the tabulation efficiency test. This represents a gross efficiency of 14 per cent. He made 7 errors. Deducting 0.9 per cent for each error, or a total deduction of 6.3 per cent, from his gross efficiency of 14 per cent, he made a net efficiency ratio of 7.7 per cent.

In Table 2, this amount is indicated as 2 per cent, due to the fact that the penalty for each error was computed for each group of 50 strokes, and not for each individual test taken. (See Table 2.) The use of such a table saves time in computing results.

### A More Scientific Error Penalty

It might have been sufficient to find the gross efficiency ratio, except that pupils, knowing that the greater the number of strokes in the efficiency test the greater their efficiency ratio would be, paid little attention to errors, unless they knew in advance that there was to be a penalty for errors. I, therefore, decided to deduct 1 per cent for each error. But, obviously, one error for the student writing 20 w.p.m. is more serious than one error for the student writing 40 w.p.m. How many errors could a pupil make to constitute 1 per cent of the quantity written?

TABLE 2. ERROR VALUES

Total Strokes Efficiency Test	Per Cent Penalty per Error
200	2.5
250	2.0
300	1.7
350	1.4
400	1.3
450	1.1
500	1.0
550	0.9
600	0.8
700	0.7
800	0.6
1,050	0.5

### How to Read Table 2

Read Table 2 as follows: When the efficiency test totals 200-250 strokes, the value of each error is 2.5 per cent penalty.

When the efficiency test totals 350-400 strokes, the value of each error is 1.4 per cent penalty.

If desired, the table may be verified as follows: 500 strokes = 100 standard words. If 1 per cent error is to be determined, point off two places to the left; student may make 1.0 error. Likewise, 200 strokes = 40 standard words. 1 per cent error allows 0.4 error. Therefore, 1 error equals  $0.01 \div 0.4$ , or 2.5 per cent, etc.

Table 2 shows what I did. For example: A student writing 1,000 strokes would be writing 200 words. One per cent of error would mean that he could make errors on two words. The value of each error would be 0.5 per cent. Another student writing 500 strokes would be writing 100 words. One per

cent would be one word; he could make one error for 1 per cent penalty. A third student writing 250 strokes would be writing 50 words. He could miss only 0.5 of a word for a 1 per cent penalty. Each word in error would have a value of 2 per cent. Table 2 shows how this worked out at intervals of 50 strokes each.

Note in Table 1 that Pupil No. 7, who wrote a comparatively large number of strokes in the efficiency test, although making 12 errors, was penalized only 8.4 per cent, but that Pupil No. 13, who wrote comparatively few strokes in the efficiency test, although making only 6 errors, was penalized 12.0 per cent. In other words, the amount of penalty per error must be in proportion to the amount written—not a flat rate per error. This position is in line with several recent articles in the *American Shorthand Teacher*.

The penalty per error is shown in Column 7, which, when multiplied by the number of errors made in the efficiency test (Column 6), gives the total penalty for errors as shown in Column 8.

Column 9 is the net efficiency ratio, which means the gross efficiency ratio (Column 5) minus the total deduction for errors (Column 8). It represents the efficiency of the student in tabulations such as those given in test B-1.

### Items of Special Interest

In reading Table 1, several elements need to be considered. The test was given to students who had had more than the usual amount of practice in tabulation, due to the fact that I am personally so much interested in the column-center principle.<sup>1</sup> These students knew that system pretty well and made fairly good progress in the test, compared to what other students in other schools would make.

This is not due to the fact that I am a better teacher, but the students knew the system and the terms; knew, for example, what I meant by the instructions, "Let the space between columns be 4 typewriter spaces." Students of other schools would not understand such instructions unless they had had work by my method. (I find occasionally that even one of my own students forgets momentarily that that means 4 spaces between columns *at their widest point, including headings, not necessarily between the figures in the column*.)

<sup>1</sup> See "Tabulation Technique," by B. Bargen, published by The Gregg Publishing Company.

TABLE 3. AVERAGE EFFICIENCY RATIOS IN TABULATION AT GIVEN SPEED LEVELS

Basic Speed Level Straight Copying W.P.M.	Number of Pupils on Speed Level	Per Cent Gross Efficiency			Per Cent Net Efficiency		
		High Ratio	Low Ratio	Average Ratio	High Ratio	Low Ratio	Average Ratio
25-29	2	14	7	10	7.7	1.9	4.8
30-34	5	14	8	11	12.6	2.3	5.8
35-39	7	17	7	12	11.6	2.8	7.5
40-44	3	13	11	12	11.8	8.9	10.4
45-49	5	14	9	11	5.0	0.8	3.1
50-54	0	—	—	—	—	—	—
55-59	1	3	3	3	-9.0	-9.0	-9.0
Total	22	17	11	11.2	12.6	8.9	5.7

Pupil No. 13, an excellent typist, was the fastest on the straight-copy work, averaging 55 w.p.m. on the three 30-minute tests. But she joined the class at the beginning of the second semester. She had not had the thorough, extensive ground work in tabulation and planning that the other students had had. In addition, she was very weak with figures—she simply could not add, subtract, or divide correctly. Thus, she spent much time proving her plan sheet. This accounts for her low efficiency ratio.

*Note:* The best student completed four exercises, an average of only about 7 minutes per exercise of tabulation. This included the time both to plan and to type. The poorest student completed only one exercise, but this one exercise

is about the equivalent of one for which civil service examinations allow 15 minutes.

#### Efficiency Ratios at Given Speed Levels

Table 3 summarizes the efficiency ratios at the various speed levels. The class, numbering twenty-two, is too small to warrant drawing any reliable conclusions, of course, but the table indicates a gradual rise in efficiency up to the 40-44 word level, after which there is a sharp decline in efficiency.

Even the gross efficiency ratio never rose above 17 per cent, and the highest net efficiency ratio was 12.6 per cent. I am wondering how these figures compare with your own idea of what pupils should be doing at the eighth month of instruction in typewriting.

## What Is Skill and How Is It Acquired?

We have to thank Dr. Charles E. Benson, of New York University, for answering this question in one of the outstanding pedagogic contributions in the field of commercial education. A few months ago, speaking to a gathering of New York City commercial teachers, this distinguished psychologist explained what skill is and how it is acquired. Every teacher of a skill subject who heard that address left the meeting a better teacher.

Dr. Benson's address will appear in full in the March issue of the *Business Education World*.

# What's on the Next Page in Social Adjustment of Education for Business?

By IRVING R. GARBUtT

Director of Commercial Education, Cincinnati, Ohio

*As a United States representative to the World Federation of Education Associations, which met in Dublin, Ireland, August 2, 1933, Mr. Garbutt delivered an address on the above subject. We are publishing a summary of that address at this time because of its timeliness in relation to several important forthcoming conferences in the field of business education.*

**A**S we turn the leaf of the present, what are we going to find on the next page? New problems, no doubt; new ideas, I hope; a new philosophy, perhaps; and, I am sure, a new courage to meet and solve them all. As I turn to the next page I find staring at me in bold headings the terms, "leisure," "social adjustment," "economic illiteracy," and many others. The ones named I shall try to discuss briefly, without attempting to solve them wholly, believing that no one man, no one school system, no one nation can solve them alone, but being confident, however, that they can be solved by the combined efforts of all men, all school systems in all nations, through a new conception of the education of our youth.

## Training for Leisure

Leisure is not so much a time of freedom from the tasks we ordinarily have to perform as it is the finer and more enjoyable aspects of those tasks. We are not so much interested in increasing the time in which we shall be free from all productive labor as in the productive labor itself when it is released from its strain and monotony.

Another theory of leisure, however, maintains that the routine of the labor of life has always been a kind of necessary evil. This conception is, at best, uninspiring and monotonous. If leisure is to be enjoyed, it must be earned. The utmost enjoyment of a period of rest is to be derived by looking back on a task well done and the labor that one has put into it. The view from the top of the mountain cannot be separated from the exhilaration of the climb. Real leisure must come from and be directly associated with

work. The pleasures of life come to us in and through bodily exercise and adjustment upon which we, as organisms, depend just as we appreciate more deeply the rose because we must guard against the thorn.



IRVING R. GARBUtT

Education in our schools and colleges is drifting away from the pure sciences, the liberal arts, and the professions, and is turning in the direction of technical and vocational training. We are increasingly training our young people for the supervision of machines, but we are neglecting one of our major responsibilities—that of training for leisure itself.

We already stand upon the threshold of a new era in which leisure is to become a vital factor. It is a leisure in which we can still feel a productive responsibility and a finer sense of our social relationship with all mankind.

The present economic situation has set before the world most vividly the necessity for a change in our whole scheme of public education so as to include information and instruction in the all-important subject of leisure. It seems to be the opinion of economists and leading business men that, with labor-saving machinery and methods of organization, the work of the world will be done more quickly and easily every day. It is believed by those who have made a study of the situation that in coming generations the day's work will be done in three to five hours a day and in a five-day week, and that the rest of the worker's time will be given to recreation, to travel, to study, and to the enjoyment of life generally.

What effect is this excess of leisure going to have on society? How are people going to react to it? How are the young people, just out of school, going to employ this extra time? In self-indulgence and pleasure, as they see it, or in self-improvement and acquiring a knowledge of the finer things of life? This whole problem is an educational one, and our schools should recognize it and include it as a school responsibility. The ultimate goal is not more efficient machinery, but more efficient men and women.

### Economic Illiteracy

What is this new monster, economic illiteracy, that has arisen out of the world-wide depression, and what are we going to do with him? Well, let's see what education can do. We are coming to the time in our public schools when we shall reorganize our whole scheme of secondary education. We shall offer many courses of instruction in many subjects, some vocational, others not; some vocational to some students and not so to others, and all in the same school. In this reorganization, the curriculum will be so set up that when a boy or a girl comes in contact with our school system, at any point, even in the ninth grade or in a lower grade, he or she will find something vocational and also something not vocational, to the end that, at whatever point the student may leave the system, he will carry out into life at least something that will make him more efficient, that will give him a greater sense of his responsibility as a citizen in his community, and that will also make him more cultivated because the schools have taught him something of actual

life, not only in the abstract, but in its application to life problems.

I do not wish to convey the idea that education is to be a relief from labor, or even from drudgery, but rather that in the further use of mechanical energy, and the more economic and intelligent direction of human effort, economic illiteracy will be reduced to a minimum.

### Every Man Should Work

No man, educated or uneducated, has a right to be useless or idle. He should work and earn the money to pay his bills. The world owes no man a living, but every man owes the world a full measure of economic efficiency and service on the level at which he functions. In no other way can activity and learning be so closely united. In no other way can good conduct and good government be so safely intrusted to a few people. In no other way can economic illiteracy become a minimized factor in our national life.

Our safety now lies in the education of all classes to common ideals of individual efficiency and public service along useful lines and with common standards of citizenship. To this end the individual must be trained, academically and vocationally, and it will be better for him if he does not know just when or how.

In this process of education, we must remember that one man's vocation may be another's avocation; that all study is educational, and that utility does not lessen its value; that much of our education comes from association, and that the best of it comes in no other way.

### Education Not Confined to Books

Education is not confined to books alone. The world, with its thousand interests and occupations, is a great school. Let us, then, teach the human aspects of all subjects in all lands and in all nations, so that our youth may grow up with a better understanding not only of commodities, but also of men and women.

Education is no longer a luxury. It has become a necessity for the doing of the work of the world, and whether we regard it as cultural, industrial, or commercial, it must be worth while; it must contribute to the efficiency of men in their service to society.

## Economic Myths

By Dr. HAROLD F. CLARK

Professor of Educational Economics, Teachers College, Columbia University

*This series of myths by Dr. Clark started in the September issue. The series will continue throughout the year. Dr. Clark invites correspondence and discussion on these myths through the columns of this magazine. His fourth article on "What Economics Should Teachers Know?" will appear next month.*

### ECONOMIC MYTH NO. 12

#### Unemployment Is Inevitable

**M**ILLIONS of people believe that unemployment is inevitable. Go where you will in the United States, and you will find people taking the attitude that the present unemployment situation is part of the inevitable order of nature.

It is easy to see, however, that unemployment is not necessary in a society where each person does all his own work. If each individual is working only for himself, he naturally continues to work until he obtains what he wants, and then he stops. Many will agree that this scheme would be most suitable in an independent economy, but that in our type of economic order some people will always be unemployed and many people will be unemployed at times.

Again, we are inclined to think that the generalization is all too sweeping. We have carried over the methods of economic control from a simple economic order. They, obviously, will not work at the present time. Unemployment is not inevitable. It cannot be abolished without setting up new instruments to control our economic order. To bring about such changes should be an important part of the effort of every individual.

### ECONOMIC MYTH NO. 13

#### There Are Too Many People in Each Occupation

**O**NLY the other day a well-informed person made the statement that there were too many people in each occupation. This statement was based upon the difficulty of finding any occupation that needs more people. It is quite true that an investigator of any of the important occupations in the United States would have good reason for think-

ing that there are too many people in any one of those occupations. Certainly, if he asks the people in the occupation, they will say that there are too many people in it.

But is it not just the least bit ridiculous to say there are too many people in each occupation? Would the situation be any better if each occupation had just half as many people in it? The country had serious unemployment when the population was smaller, and there is no reason to think the situation would not be just as bad if there were only half as many people today. The trouble grows out of maladjustments among occupations, and not out of the absolute number.

### ECONOMIC MYTH NO. 14

#### There Are Too Many People

**C**LOSELY allied with the preceding fallacy is the widespread belief that there are too many people. Naturally, if there are too many people in each occupation, there are too many people. But perhaps no one of these persons who says there are too many people really believes that the United States is overpopulated.

If one stops to analyze the question, he sees how absurd it is to think that, if there were only 10,000,000 people in the United States, all would be well. There is no reason to think that a population of 10,000,000 or 50,000,000, or any other number smaller than it actually is, would solve our difficulties. So far as I know, there is not a competent authority who will state that the United States is overpopulated. Practically all the people who discuss the optimum population of the country agree that a population substantially larger than ours is at present would be preferable. The only reasonable assumption is that those people who say there are too many people in the United States have not investigated the facts.

### ECONOMIC MYTH NO. 15

#### Only the Able Get Rich

**O**NE great justification of the present economic arrangement is the fact that only able people can accumulate money! Each man earns according to his ability and what can be fairer than that? The man who earns \$10,000 a year is ten times as able as the man who earns a thousand. The man who earns a million dollars a year is a thousand times as able as the man who earns a thousand.

The inventor who works hard gets rich; the man who is lazy does not. The scientist who makes \$5,000 a year is only one-tenth as able as the banker who makes \$50,000. The racketeer who makes \$100,000 a year is a hundred times as able as the school teacher who makes \$1,000, because everybody knows that only the able get rich.

Someone might answer by saying that only those able to get rich get rich, and careful study might show that two people of the same ability might not make exactly the same earnings. One might be willing to indulge in practices that bring a high return while the other might not. It is perfectly clear that the farmer on whose land oil is discovered is many times abler than his neighbor on whose land oil is not discovered, because have not our best citizens told us that only the able could get rich? It will probably take a long time to convince the American public that there may be a great many other factors than ability that determine the amount of money one receives.

### ECONOMIC MYTH NO. 16

#### Only the Honest Get Rich

**A**CAREFUL study of the history of the great fortunes of America will show that only the honest get rich! Of course, the study will have to be so carefully made that it deals only with the honest actions of those who get rich. Honesty is the best policy, we have always been told, and surely a check-up of the methods of obtaining riches will bear this statement out.

Let us go back and look at the very early fortunes that were obtained from land. Certainly, the record of taking the land from the Indian is an honest record. There are no deeds in that seizure of which one would be ashamed—no unfair methods were used to

defraud the government or the Indians of land. The story of the fur trade with the Indians is entirely an honest and upright affair. The land speculation attending the development of canals and railroads makes an honest and upright story. Nothing connected with the railroads in New York State would be called other than fair dealing. The history of the cotton mills in New England reveals strict honesty and fairness to everybody concerned.

Of course there is no breath of scandal or unfairness in the more recent development of steel or of oil. True, in recent years the Supreme Court has said some things about one or two oil deals, but then, doubtless, the Supreme Court was not informed of all the facts, or did not understand what honesty meant. A few people, of course, might object to some of the older stories of oil.

Certainly, no money has been made except by strictly honest processes. The great mining companies of the West have always used upright methods to obtain the titles to their land. There has been no effort on the part of the banks, insurance companies, or other concerns to use private information either for the profit of individuals or of the particular concerns. The story of American business will convince one that only the honest get rich. Perhaps there is more than one person who would say this is only a myth.

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### Cutting Down on Salt

**S**UPPOSE a family's budget for food looked like this:

Meat, per month.....	\$12.00
Milk, per month.....	5.00
Groceries, per month.....	35.00
Salt, per month.....	.10

What would you think of the brains of the head of the house if he said: "Strict economy being necessary, let us cut down on salt"? But to cut down on the relatively tiny amounts a community spends on its public library service is to cut down on the intellectual salt which gives savor to most of life, which brings out the flavor and the meaning of many of life's happenings; which, especially in times of material hardship and privation, can do more than any other factor to make life palatable. Don't cut the salt out of your budget! — Dorothy Canfield Fisher. From *Journal of Education*, June 5, 1933.

# Business English Needs of the Shorthand Pupil

By MARY THORNDYKE

Girls' Commercial Vocational High School, Cincinnati, Ohio

THE existence of the business English course in a high school commercial department is based upon the need of the shorthand pupil for help in certain phases of English. As this course is now commonly organized, it is of little help to the pupil.

A few suggestions are offered to teachers of business English from the point of view of the weaknesses shown by pupils who enter the shorthand course.

## Drill on Gregg Vowel Sounds

Shorthand is written by sound alone. If an intensive drill of four or five weeks were given on both vowel and consonant sounds, but particularly on vowel sounds, the shorthand pupil would be prepared to write by sound instead of struggling with the mental image of the printed word. This would be especially helpful, if the drill were given just before he took up shorthand, or at the time he was learning the symbols for the letters. The twelve vowel sounds that Gregg recognizes should be the only vowel sounds considered in this drill.

Especial attention should be given to certain vowel sounds that are represented by the same letter in longhand, but by different symbols in shorthand. They are: intermediate *a* and broad *a*, long and short *u*, and long and short *i*. These contrasting vowel sounds should not be just casually mentioned, but should be thoroughly taught, as the pupil's inability to distinguish between them often leads to such discouragement in the first term of shorthand that he withdraws from the course.

## Drill on Prefixes, Roots, and Suffixes

Pupils are not familiar enough with the common prefixes and suffixes to recognize them as such, when it is necessary to write the shorthand symbol for them in a word. It would be of great help if the English teacher would train the pupil to establish the habit of separating the prefix, root of the

word, and suffix in his mind. The exercise of writing a list of words with prefixes and suffixes on the board, and then requiring pupils to mark off the prefix and suffix of each word in parentheses, is excellent. This exercise should be given at the time that the units on prefixes and suffixes are being considered in shorthand. If the prefix, root, and suffix of a word separate unhesitatingly in the mind of the pupil, it is no trick at all to build up shorthand outlines for long and apparently difficult words made up largely of prefixes and suffixes. The speed of the pupil will suffer if he is unable to do this, as the chances are that he will write out the whole outline instead of using the shorter symbols for prefix and suffix.

## Drill on Spelling of Common Words

After the principles of shorthand have been learned, the pupil devotes his shorthand periods to acquiring an extensive shorthand vocabulary of words commonly used in business dictation. There are certain frequently recurring words in the letters dictated, which he must practice until they can be written automatically, because these words are likely to occur in all letters. It is as essential that he be able to spell these words just as automatically as he is able to write the shorthand outlines, and they should constitute at least the larger part of the English spelling list. It would be an easy matter for the English teacher to compile such a list. It may seem to the English teacher that these words are too easy to bother with, but it is quite evident to the shorthand teacher that they are misspelled all too frequently.

## Drill on Sentence Structure

Punctuation is much more flexible than it used to be, since it has become the fashion in business to punctuate as little as possible. The period is the great stumbling block now for the inexperienced transcriber of shorthand notes. What shorthand teacher has not felt

discouraged over such punctuation as, "If you are given enough time. I believe you will pay all your bills." or "I have the overtime draft. Which you will send to Henry & Co."? An extensive drill on sentence structure is necessary if this evil is to be overcome.

### Teach Synonyms for Useful Business Words

In transcribing notes, all stenographers are, at times, forced to substitute some word other than the one dictated, sometimes on account of faulty outlines, sometimes because the dictation has been too fast for the outline to be written at all. An intensive drill in synonyms will prove it one of the greatest aids to the shorthand student.

Many English textbooks devote a great deal of space to sentences in which blanks are left to be filled with the proper word. Unfortunately, the words to be filled in are not those that are useful in a business vocabulary. English teachers could adapt this plan to a business letter, leaving some of the most important words blank, requiring the pupils to fill them in orally in class, and then discussing the appropriateness of all the words

submitted. In the typing period, pupils should type the entire letter, filling in each blank with several synonyms discussed in class. The pupil will acquire a surprisingly large vocabulary, which will help him out of many a tight place when he is transcribing his notes.

### Base Remedial Drill on Carbon Copies of Transcripts

There is no better way for a business English teacher to find out what remedial work is necessary than to see the letters the pupils type from their shorthand notes. After transcription of miscellaneous dictation has started, a carbon copy of every letter typed should be sent to the English teacher. If the same errors in English appear in all the letters, class exercises should be given on the principles involved. Generally, different pupils make different errors, in which case individual instruction for a few weeks will do wonders, for the work will be motivated, as pupils come to realize that the use of incorrect English in a letter is a disgrace in any office.

## A Reexamination of Traditional Shorthand Teaching Methods

By LOUIS A. LESLIE

Associate Editor of *The Gregg Writer*

*Mr. Leslie is an eminent authority on the subject of shorthand. He has been intimately associated with the production of shorthand texts under Dr. Gregg's direction for the past seventeen years. For penetrating insight into the crux of a shorthand pedagogic problem, he has few equals. Each month, through the medium of the GREGG NEWS LETTER,<sup>1</sup> of which he is the editor, some 10,000 teachers of shorthand and typing benefit from his helpful teaching suggestions.*

THE hand of tradition has always borne down more heavily on the methods of teaching shorthand than on the methods of teaching other commercial subjects. Strangely enough, this is due to the historical background of shorthand, a background that most of the commercial subjects lack. It has been said that the study of history is valuable because it enables us to profit by the

mistakes of our forefathers. But another, and more veracious, saying is that history repeats itself.

We do many things simply because we have always done them, without stopping to analyze our reasons for continuing to do them. That is why so often a stranger to your problems will see something that you, as an expert, may have overlooked entirely. The stranger looks at each problem with an impartial eye, whereas you, as the expert, take certain things for granted—they have always

<sup>1</sup>The *Gregg News Letter* is published monthly by The Gregg Publishing Company and will be mailed without charge to any commercial teacher requesting it.

been that way. It is our purpose now to attempt to examine with an impartial eye some of the problems of teaching shorthand.

Let us look first at the history of the teaching of shorthand, to see why it has had the unfortunate effect mentioned above. Many of our ideas about the teaching of shorthand date back a hundred years or more, and the retention of many useless, or even harmful, teaching devices is due to a confusion of ideas induced by the seldom realized fact that there are three kinds of shorthand teaching methods, each admirably adapted to its own purpose, but usually maladapted to any other purpose.

### Shorthand Taught to Three Classes of Pupils

Broadly speaking, we teach shorthand to three classes of pupils: (1) those who are to become teachers; (2) those who are to become stenographers; and (3) those who are to become shorthand reporters.

A great deal of the difficulty we experience in teaching shorthand is due to the fact that we go loaded for elephants when we are only hunting squirrels. Naturally, when the bullet strikes, the squirrel is often blown right off the map.

### Teaching the Teacher

In teaching shorthand to those who wish to become shorthand teachers, we must, necessarily, retain the formalized type of instruction associated ordinarily with the sciences. A shorthand teacher must know every wrinkle and crevice of the shorthand system he is teaching. He must be able to quote verse and chapter to justify any outline; he must be able to explain some outlines that are not written in accordance with any verse or chapter. The shorthand teacher *should* be able to write shorthand. He *must* know his rules.

One of our German colleagues epigrammatically put the matter in a nutshell when he said, "Shorthand is a science; shorthand writing is an art." When we are concerned with teacher training, we must stress the first aspect, shorthand as a science.

### Teaching the Stenographer

When we come to the training of stenographers, amanuenses, as they used to call them, we are concerned wholly and solely

with the second aspect, shorthand writing as an art. The stenographer who is to practice the *art* of shorthand writing rather than the *science* of shorthand need know nothing about that latter aspect. It is, indeed, usually impossible to make any serious attempt to teach our stenographic pupils anything worth while about the science of shorthand. Our time is too limited; our pupil material is seldom adapted to it.

Experience has proved that an ill-digested smattering of the science of shorthand is positively a deterrent to skill in the art of shorthand writing. It is because of this fact that the formal teaching of shorthand often defeats its own end.

It is because of this that we find in shorthand classrooms an anomaly seldom found in the classrooms of teachers of the humanities. It is a common experience to find that a shorthand teacher will get his best results in his first year or two of teaching. Why is this? Because the beginning teacher usually does not know quite so much shorthand as the more experienced teacher. Lacking any very profound knowledge of the subject as a science, the teacher falls back on drill.<sup>1</sup> In order to keep the pupils from asking embarrassing questions, he keeps them reading, writing, reading. After some experience as a shorthand teacher, he becomes more confident of his knowledge and relaxes the pressure on drill work, permitting, and sometimes even encouraging, students to discuss points of shorthand theory. Unwittingly, the beginning teacher has hit upon the best possible teaching device for a habit-forming subject such as shorthand. The stenographic or amanuensis pupil needs almost nothing but great quantities of drill work. Teacher presentation or class discussion of points of theory is close to 100 per cent waste of time. The student does not learn to write by talking about writing.

### Teaching Reporters

The training of shorthand reporters presents problems that differ in many ways from both the training of the teacher and the training of the amanuensis or stenographer. We do not intend here to go into the proper methods of training reporters, any more than we have

<sup>1</sup>The term "drill" as used in this article should be interpreted as meaning simply vigorous pupil activity, including both the reading and writing of shorthand, in accordance with modern pedagogic principles governing the acquisition of skill.—Ed.

gone into the proper methods of training shorthand teachers. We are interested now, primarily, in the training of the amanuensis, and shall touch on the other two types of shorthand training only where it is necessary to point out differences and to draw distinctions.

It is proper that the shorthand reporter in training should spend much time in perfecting his executional skill. It is also proper that he should spend much time automatizing the shorthand forms for large numbers of advanced phrases as well as for the more difficult, though seldom met, words. To the amanuensis in training, these skills have no value that will justify the time spent in their acquisition.

The amanuensis, as such, has little legitimate use for shorthand speeds of more than 100 or 120 words a minute. The attainment of such speeds does not require anything like the executional facility and phrasing skill needed by the reporter, who must write at speeds of from 160 to 200 words a minute.

#### Let Us Reexamine and Reanalyze

Now you can see what I mean by referring to the unwholesome influence of history and tradition on the teaching of shorthand. In the centuries during which shorthand has been taught, the three types of shorthand training methods have become almost inextricably confused. That is why I appeal now for a re-examination and reanalysis of our shorthand teaching problems, a redetermination of our teaching objectives, and a redetermination of the most direct road leading to those redetermined objectives. Strangely enough, the result of this process of analysis and determination will be that we can accomplish more by teaching less. We have been teaching too much and drilling too little. Let us see . . .

The stenographer or amanuensis is required to write in shorthand at the rate of 100 to 120 words a minute, reading back or transcribing on the typewriter the notes so taken.

It is a determined fact (this is fact, rather than opinion, but we haven't space to go into that now) that the amanuensis described in the preceding paragraph does not need the executional skill of the shorthand reporter and should not have the profound theoretical knowledge of the expert teacher. An attempt to acquire the first only wastes the pupil's time and diverts his attention from other, and more necessary, skill training; an attempt to

acquire the second not only wastes his time, but usually proves a tangible handicap to the attainment of the degree of skill required of the amanuensis.

#### In Conclusion

In conclusion: The amanuensis in training needs only simple drill, but he needs plenty of it. What little shorthand theory is to be given should be merely the inevitable concomitant of the drill work. If the pupil is given the quantity of drill work he should have, the theory will take care of itself. The useful principles of theory will be repeated so frequently that the student cannot, if he would, fail to learn them. The infrequently used principles of shorthand theory, coming so seldom, will not, perhaps, become entirely automatic, but if they occur too infrequently to become automatic, they will occur so infrequently that the student's lack of skill in the use of those principles will not handicap him.

You will find in the Gregg Shorthand Manual, for example, 1,290 examples of Paragraph 14, as compared with only 62 examples, in the entire book, of Paragraph 18. Obviously, at the end of such a course as is here advocated, the student's skill on Paragraph 14 will be vastly greater than his skill on Paragraph 18, but should not this be the case? Thus, the type of course suggested here, consisting almost exclusively of vigorous drill work on the Manual, "Gregg Speed Studies," "Graded Readings," and "Gregg Speed Building," will automatically put the emphasis where it belongs, will automatically give the student the greatest skill on the principles he will have the most occasion to use.

There is no need for us, as teachers, to worry about the apportionment of teaching time to each principle in the Manual. This apportionment will take care of itself much more accurately than we can take care of it if we will confine our work to drill, vigorous and extensive drill, on the word lists and phrases in the Gregg Shorthand Manual and "5,000 Most-Used Shorthand Forms" and on normal business letters or articles such as are found in "Gregg Speed Building."

Should these conclusions seem to you to be rash or unwarranted, reexamine for yourself the objectives that should be set up and the road you should follow to reach those objectives, keeping in mind the three separate types of shorthand training described.

# Methods and Devices in Teaching Typing

By VERNAL H. CARMICHAEL, M.A.

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HERE is probably one best way to perform any given activity, but there are certainly many more ways to arrive at just as good results in the performance of the same given activity. This statement is true when it concerns the activities of the business, industrial, and professional world, and it is just as true in the activities of school life. One manufacturer may market his product through jobbers and wholesalers, while another may sell his product direct to the consumer. The end results may be practically the same.

The methods used with splendid success by one teacher may be discarded by another teacher who succeeds equally well with techniques entirely different. It is certainly unfair to any good teacher for her supervisor to force her to take over in their entirety the methods of someone else, unless this teacher can use the superimposed methods with freedom and ease. Personalities differ. Individual differences among teachers, as well as among pupils, must be recognized. What may be the best way for one teacher to perform a given task may be the poorest way for another teacher to do the same thing. Many teachers, however, are using poor methods, which should be improved or exchanged for methods that have been tested and tried by teachers who are getting results.

## Incentives to Practice

The success of any teacher of typing is determined largely by the methods he uses to control the flow of work through the classroom. Since a constant stream of completed exercises must, necessarily, flow from the fingertips of learning typists, definite plans must be made to direct these learners as they work. Economy of effort and of time of both the pupils and the instructor must be effected.

If quantity and quality of work are to be maintained at proper levels, the interest of the pupils must be aroused and held at a high pitch. Without interest, the typing teacher will achieve little in the way of satisfactory results. Interest and enthusiasm in a class-

room indicate that the teacher is on the job. A great step has been made toward the success of a teacher's program when a good atmosphere has been created. This atmosphere will be built around the interest and effort put forth by the teacher, for there will be a direct reflection of the attitude of the teacher in the activities of his pupils. Any teacher can well afford to spend a great deal of extra time and effort in building an atmosphere of industry and good will in the typing classes.

### According to Pyle:

The most successful teacher is usually the one who has the greatest ingenuity in discovering and using devices that arouse interest and serve as incentives. The teacher who has solved the problem of maintaining a high degree of interest and enthusiasm in the work of the school will have few other problems.<sup>1</sup>

### Pyle lists as incentives to practice:

(1) Knowledge of the end sought, (2) knowledge of the score, (3) knowledge of errors, and (4) knowledge of when the material learned is to be reproduced.<sup>2</sup>

## Explain Your Plans to Your Pupils

In discussing learning of the pure-practice type, Morrison says: "Consciousness of the goal should be guaranteed at the outset."<sup>3</sup>

He further states: "The pupil needs to be made conscious not only of progress but of the nature of the progress."<sup>4</sup> Pupils must understand definitely what is expected of them. They appreciate your frankness in coming to them openly with your demands, even though these demands may be heavy in many instances. The devices to be discussed have been devised to provide the type of motivation referred to in this paragraph.

In the typing class, the pupil must master his keyboard, perfect his technique upon the keyboard, and learn the uses of all the parts of the typewriter. He must learn how to balance simple or complex material neatly upon

<sup>1</sup>Pyle, William Henry, "The Psychology of Learning," Warwick and York, Baltimore, p. 64.

<sup>2</sup>*Ibid.*, pp. 66-68.

<sup>3</sup>Morrison, H. C., "The Practice of Teaching in the Secondary School," The University of Chicago Press, p. 544.

<sup>4</sup>*Ibid.*, p. 545.

the page, how to write business letters, how to tabulate statistical information, how to prepare business and legal forms, etc., how to use modern duplicating devices, how to operate and care for various makes of typewriters, how to use the typewriter efficiently under varied conditions, and a great deal of related information.

It would be a long story to go into a detailed discussion of all the methods and devices that are used to present all the different phases of learning to typewrite. The purpose of this discussion will be to deal with some of the special devices used to create and maintain interest in developing skill in the use of the typewriter and in strengthening the neuromuscular abilities.

A teacher can do much by precept and example toward the creating of ideals in his classroom. The classroom should be neatly arranged, bulletin boards should be changed often and carefully posted, announcements or data typed by the teacher for bulletin boards should be properly balanced and correctly written, and the blackboard should be filled

with information and ideas that will inspire the pupils to do better work.

Our bulletin boards and blackboards are used for posting announcements, novel related ideas, students' exercises, graphs and other records of students' achievements, standards and regulations, and other interesting information. Most of the records that are posted are records of achievement in straight-copy tests. This type of test should receive special emphasis, since it has so many good uses. It is one of the best types of drills that can be given, for it gives practice in typing words in their natural order and frequency. Techniques for measuring and controlling this kind of drill are easy to set up and manipulate. Interest can easily be aroused and maintained through the posting of results in an interesting manner. Students observe and study the charts that are posted on the bulletin boards. The accompanying chart outlines the standards we use in the form in which we use them, except that they are modified to fit the semester plan used in the high school. The speed requirements are based upon 10-minute tests.

### CENTRAL HIGH SCHOOL COMMERCIAL DEPARTMENT

#### Considerations in Grading Typewriting Work

1. Attitude of student toward his work.
2. Promptness of pupil:
  - a. In handling regular exercises.
  - b. In making up back work.
3. Quality of work:
  - a. Neatness of work.
  - b. Accuracy of daily exercises.
  - c. Accuracy of speed tests.
4. Grades made on examinations and special tests.

#### SPEED REQUIREMENTS

Grade	First 6 Weeks NO SPEED REQUIREMENT	TYPEWRITING I Second 6 Weeks	Third 6 Weeks	Grade
A		30	45	A
B		22	36	B
C		15	28	C
D		8	20	D
Grade	First 6 Weeks	TYPEWRITING II Second 6 Weeks	Third 6 Weeks	Grade
A	50	55	60	A
B	41	46	50	B
C	32	36	40	C
D	23	27	30	D
Grade	First 6 Weeks	TYPEWRITING III Second 6 Weeks	Third 6 Weeks	Grade
A	65	70	75	A
B	54	58	62	B
C	43	46	49	C
D	32	34	36	D
Grade	First 6 Weeks	TYPEWRITING IV Second 6 Weeks	Third 6 Weeks	Grade
A	79	82	85	A
B	65	71	70	B
C	51	53	55	C
D	37	39	40	D

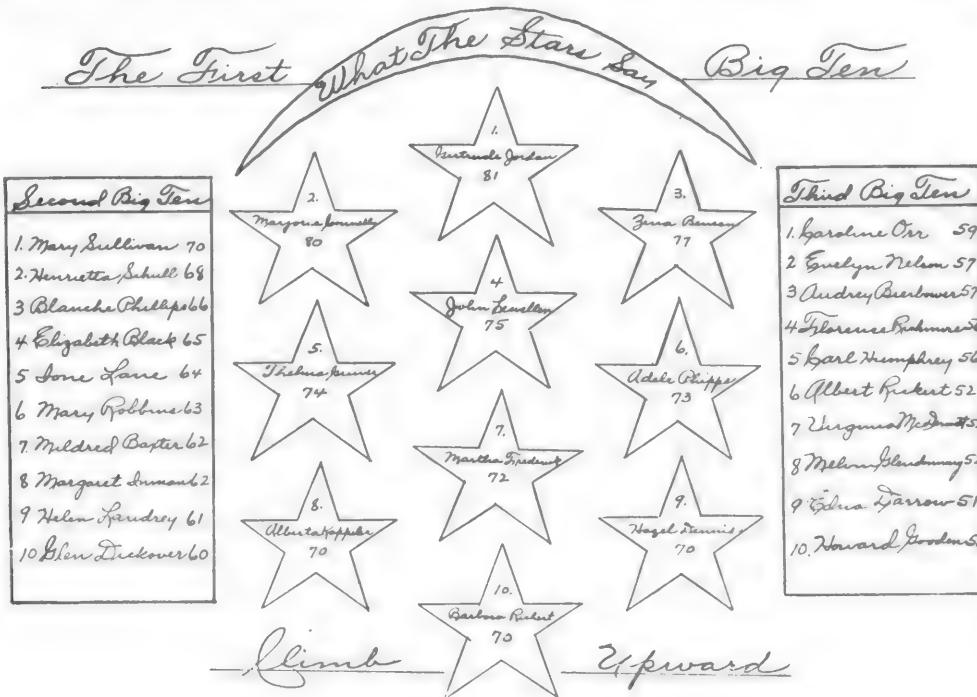


DIAGRAM OF THE "BIG TEN" DEVICE

### The Record of the Big Tens

On one section of the blackboard in the typing room, the results of the speed tests are displayed in groups of first, second, and third big tens. The students enjoy this device very much. In view of the fact that the typewriter companies have withdrawn awards, this plan has proved itself to be a satisfactory substitute. Friendly competition creates wholesome interest. It is probably better to get the individual pupil to strive to improve his own record rather than to attempt to beat the record of his classmates. Pupils should be interested in learning for its own sake, but in so many cases the ultimate end is so remote that interest lags and learning suffers. For this reason, numerous devices must be set up that will serve as a means to the end. The "Big Ten" scheme portrayed in the accompanying diagram, is such a device.

### How to Use the Record

1. Where kept?
  - a. On the blackboard, using a section about 4 feet high and 5 or 6 feet wide.
2. How made?
  - a. The moon is drawn by using a string as a compass, or by cutting a half moon out of cardboard and tracing it upon the blackboard.
  - b. In making the stars, cut out a cardboard star and trace it upon the blackboard.
3. Color scheme. (Use colored chalk.)
  - a. Moon is a bright reddish brown.
  - b. "What the Stars Say" is orange.
  - c. "The First Big Ten" is a bright reddish brown.
  - d. Stars 1, 2, and 3 are yellow. (Suggests shining.)
  - e. Stars 4, 5, and 6 are blue. (Suggests true blue.)
  - f. Stars 7, 8, and 9 are red. (Suggests danger.)
  - g. Star 10 is green. (Suggests green material.)
  - h. "Climb Upward" is green.
  - i. Rectangles for "Second" and "Third Big Tens" are also green. (Use light green.)
4. How used?
  - a. Keep records of only 10-minute speed tests on chart. .

- b. Place best test record on Star No. 1, and other test records in respective order on other stars and positions on Second and Third Big Tens.
- c. Never take a speed away from a pupil because he makes a lower test.
- d. Grade tests promptly and change record once a week. Straight-copy work is one of the finest methods to use in drill work.

The very fact that a teacher takes the time to post the results of his pupils in an attractive manner causes these same pupils to take an added interest in their work. Pupils like to know the results of their efforts. They appreciate the fact that the teacher is interested in what they are doing. The "Big Ten" idea has been tested and tried and it gets results.

## Courses in Practical Economics for Everybody

By LLOYD BERTSCHI

*Does Business Education meet an age-old need newly emphasized by conditions of today?*

*To a much greater extent than is generally realized.*

*Before we can teach young people how to live well, we must first teach them how to make a living.*

**O**N every hand, there is evidence of a rapidly increasing realization that an understanding of the practical business affairs of everyday life is an indispensable part of the education of every boy and girl. Articles and addresses by leading educators indicate clearly that the present economic situation has focused attention on a need that has long existed, but that has been largely ignored or neglected. Had our secondary schools equipped all boys and girls who attended them during the last half century with adequate business education, it is altogether likely that the economic problems of today would not exist, or at least would not be so serious as they are.

Business Education has not yet received the recognition in the curriculum of secondary education to which its *potential* social or citizenship values entitle it. The responsibility for this situation is a dual one—it must be shared alike by school administrators and by business educators. Many administrators have not fully realized that Business Education is entitled to a place in the front ranks of the secondary-school curriculum. In like manner, business educators have not adequately fostered and fully demonstrated the social and citizenship values of Business Education. The condition is a natural one, however, for which no one is to be criticized.

Until recently, the commercial course in our secondary schools has been conducted almost exclusively for the benefit of those boys and girls who, presumably at least, have had some thought of preparing for employment in the

business office. With the limited time and facilities placed at their disposal by curriculum makers, business educators have done exceedingly well at providing this group of young people with the knowledges and skills required for office occupations. To the extent that a large group of young people have been adequately trained to the point of vocational efficiency, Business Education has met an urgent social and economic need as well as, if not better than, any other part of our secondary-school program. The commercial department of every high school throughout the land has probably prepared more students for specific jobs, to say nothing of helping students to get the jobs for which they were prepared and to win promotion after initial employment, than any other department that could be named.

### A Real Contribution to the Social and Economic Welfare of the Nation

If training a vast number of young people to the point of occupational efficiency and providing them with a reserve of knowledge and skill essential to advancement and promotion is not an enormous contribution to the social and economic welfare of individuals and, hence, to the advancement of the national economy, then, pray, what is it? Such subjects as Bookkeeping, Shorthand, Typewriting, Penmanship, Business Arithmetic, Spelling, Salesmanship, Office Practice, Clerical Training, Business English and Correspondence, Secretarial Practice, and others are so

rich in direct, specific vocational-trading values that we should refrain from trying to use them as tools for any other purpose than that which they serve best, and for which they are indispensable. Used for their intended purpose, they will inevitably contribute their full share of general social values without changing their contents or aims or altering the emphasis on specific knowledges and skills essential to vocational efficiency. To "generalize" these subjects, as some say should be done, will actually destroy much of their real social and economic value.

#### Extending the Social and Economic Usefulness of Business Education

Where, then, are we going to give instruction in the practical economics of everyday life? Somewhere in the secondary-school program of Business Education we must do two things that, to some extent, have been neglected. First, we must equip students to meet and solve the business problems that are part and parcel of the daily activities of every individual, no matter what his occupation or station in life. Second, we must develop an essential understanding of and a proper attitude toward business as the most important of all our social institutions—as the agency that coordinates the efforts of mankind in the production and distribution of wealth, which means nothing more or less than man's activities in making a living.

It is these two things, and especially the first, that many of our foremost educational authorities are now stressing as a most urgent need. Strange to say, though, few if any of these authorities seem to be aware that Business Education, to a considerable extent at least, has been meeting the need for some time. Quite recently, for example, there appeared in a widely read professional magazine an urgent appeal for a new course that would prepare boys and girls to meet and solve the everyday business problems of all individuals. The article was excellent, and came from the pen of a prominent educator and high school principal.

His appeal was powerful and timely, and it revealed a keen appreciation of the function of education in preparing for life and for citizenship. But it was startling to realize that, in the very high school of which the author is principal, Business Education has been meeting this important social need for at least three years by offering a soundly

conceived junior business course! Apparently, it had never occurred to this principal that business information is actually the very thing he has in mind, nor that a ninth-grade course in his own school is actually accomplishing



LLOYD BERTSCHI

for students enrolled in the commercial course what he suggests as a necessity for all pupils in his school. Otherwise, why should he sanction a curriculum restriction that limits enrollment in the ninth-grade business science course to those students who have *previously elected* to take the commercial course, thereby excluding from it the remaining 65 per cent of ninth-grade students?

#### Danger Signals

While this situation is typical, it is not to be wondered at. A soundly conceived course in business science on the eighth-, ninth-, or tenth-grade level does, beyond all shadow of doubt, deal with the everyday business problems of all individuals, and develops a general understanding of and a desirable attitude toward Business as the social institution that supplies mankind with the necessities, comforts, and luxuries of life. But, unfortunately for the cause of Business Education, the junior business course is not always soundly conceived.

For example, in many instances it is offered as a clerical training course, consisting largely

of explanation of and precise practice in the duties of the lower group of clerical occupations in the business office. Even though offered as an exploratory or a foundational business subject, it is still part and parcel of vocational preparation. That type of junior business course will never meet the universal social need for an adequate understanding of the part that the institution of Business plays in national and world economy and in the welfare and advancement of mankind.

In many other junior business courses the job-training feature has been modified and has given way, to some extent, to Arithmetic, Spelling, Bookkeeping, etc., which have been made a part of the content. There may be sound reason for trying to overcome the deficiency in these knowledges and skills that is admittedly all too prevalent among students who enroll in the various subjects included in the usual commercial course in our secondary schools. The fact that the injection of homeopathic doses of these subjects into the content of the junior business course fails utterly to overcome this deficiency is beside the point. What is vital, though, is that, to the extent that the junior business course is loaded down with such content, just to that extent will the course be made incapable of serving the broad social purpose of providing boys and girls with the business knowledge and training that everybody needs.

### The First Step in Economic Training for Citizenship

With a junior business course of a broadly generalized content based on the business problems of everyday life and on business as the agency by means of which mankind produces and distributes the necessities, comforts, and conveniences of life, Business Education can and will take the first step in meeting the universal need for a course in practical economics for everybody. On the other hand, a conglomeration of clerical training, arithmetic problems, penmanship drills, and elementary bookkeeping is sure to limit the social values of the junior business course to such an extent that educators will justly refuse to recognize it as a means of providing the type of education that is an essential part of the citizenship training of every boy and girl. The need is sure to be met either in the business course or somewhere

else. It rightfully belongs to Business Education.

### Other Steps Have Been Taken

But the junior business course represents only the first step in practical economic training, for all secondary-school students. The typical well-balanced business course already includes such subjects as Economic Geography, Business Law, Commercial and Industrial History, Business Organization and Administration, and many others that contribute enormously to the general social values of such courses. Perhaps time will bring about a closer coordination and correlation of the content of these subjects. Certainly, that is needed in order that their social values may be realized to the fullest possible extent.

### Foundation Materials Won't Do for the Roof

Finally, attempts are being made to formulate content for what is presumably a new subject. "Practical Business Economics," "General Business Information," and other similar titles have been suggested as names of the proposed new subject. The justification offered for this new subject is, again, the universal need for business information that will be useful to all individuals, no matter what their occupation or station in life.

That the need does exist no one will deny. But an examination of several textbooks that have recently appeared reveals a proposed content for this new subject that merely duplicates the content of other subjects. For instance, at least 90 per cent of the subject matter of one of these new texts is an exact duplication of the material to be found in any one of the five or six leading textbooks intended for use in junior business courses. A substantial part of the remaining 10 per cent is a duplication of the content of texts on office practice, secretarial training, commercial law, etc. Not even the method of treatment or the aims differ in any respect.

That this new subject may possibly be intended for students about to graduate from high school or attending junior college who have not pursued a business course seems improbable. The texts are from the pens of teachers of business subjects, and the new subject is actually being advocated as a sort of capsheaf for business courses. Thoughtful

school administrators and business educators will be reluctant to make room in an already crowded curriculum for an additional subject that has little to offer except a duplication of the content of other business subjects.

What has just been said should not be interpreted as an argument against the need of new materials for a subject that will provide a course in practical economics of everyday life. Such a course is needed, and suitable text materials are necessary before it can be offered. Just what will be the nature of its

content remains to be seen. Perhaps it will consist partly of economic theory and principles correlated with the organization of modern business according to a new type of national economy that may gradually develop during the next few years.

A more immediate and important concern of Business Education is that full advantage shall be taken of present opportunities. Let us make sure that what can best be done as a part of our existing set-up is not prompted by some other department of education.

## The Profession of Accountancy

By AUSTIN H. CARR

Chartered Accountant, Toronto, Ontario

THE profession of accountancy may be regarded as of comparatively recent development, but for its origins we must look far back into antiquity. The history and the records of ancient civilization indicate that for centuries barter and traffic had existed between nations and peoples, and barter, even in its primitive form, involved some system of accounts. The explorations in the Euphrates Valley have brought to light tablets of the ancient city of Babylon containing records of loans, of partnerships, and of other commercial transactions, and some of these tablets date as far back as 2600 B.C. It has also been discovered that the sons of Egibi carried on business as bankers or money lenders in Babylon for a considerable period up to the fourth century before Christ. The Phoenicians, too, in their advantageous position on the eastern Mediterranean, had secured the carrying trade of the ancient world and had their keepers of accounts no less than their clever manufacturers and enterprising merchants.

### First Use of Double-Entry Ledger

It was in the days of the great trade activity of the Italian city-states of the fourteenth and fifteenth centuries that accounting first grew to the dignity of a science. With their control of the Mediterranean and the commerce of the world, such cities as Genoa, Florence,

and Venice had their counting houses staffed with men who not only kept with accuracy the records of business transactions, but who, in the spirit of inquiry of that day, were on the alert to discover a simpler and more exact system of recording these transactions. A number of textbooks on commercial subjects were published in Florence during the fourteenth century, when this city was a leader in banking operations throughout Europe. While the first-known treatise on the subject of double-entry bookkeeping was published in the fifteenth century in Venice, discoveries now prove beyond doubt that the double-entry ledger was in use in Genoa as early as the year 1340. Without such an advanced system of keeping accounts for recording the results of their vast commercial transactions, it is acknowledged that the banks of Florence could not have conducted their world-wide operations of the following century.

### The English Background

It is to Great Britain, however, that we must turn for the record of the greatest advances made in accountancy theory and practice. The earliest system of accounts was the English Exchequer, established about the year 1100. The system was based on the Domesday Book, which was a record of all taxable estates in the kingdom and from which the treasurer's Great Roll or Pipe Roll was written up. To each sheriff was intrusted the collection of the taxes in his district. He made his returns twice yearly, receiving at the first accounting half a tally stick having notches

*Note:* An address delivered before the 1933 Convention of the Canadian Gregg Association, Toronto, Ontario.

representing the amounts turned in to the treasurer, who retained the other half. At the final accounting, the sheriff turned in his tally as evidence of payment made. It was then compared with the one in the treasurer's keeping to see if alterations had been made.

In 1543, an English translation was made of "Reckonings and Writings," a treatise on bookkeeping written in 1494 by Pacioli in Italian. For a time, it was thought that this work was original, but it is now known that Pacioli put into printed form the lectures he had heard from teachers of his early days. In 1635, Dafforne, an English accountant, published the "Merchant's Mirror." This treatise on accounting passed through several editions. In 1777, a step forward in accounting theory came when one by the name of Hamilton published a book outlining systems for shopkeepers, tradesmen, land stewards, and farmers, and classifying accounts as personal, real, and fictitious. The books in his system were the waste book, journal, and ledger. His ledger was closed by journal entry, and in his balance sheet, assets were placed on the left side and liabilities on the right. Some of the terms used by him were "suspenses book for bad debts," "cash book," "merchandise charges," "petty cash," "postage ledger," "bill books," and "balance ledger for customers." Many of these terms persist to this day.

### Influence of Foreign Trade

A great impetus to the development of the science of accounting followed upon England's interest in commercial and in colonial expansion—two integrally connected movements. For hundreds of years, Englishmen had traded abroad, but it was during the sixteenth and seventeenth centuries that many great trading companies were formed. For example, in the year 1600 the East India Company received its charter, and in 1670 the Hudson's Bay Company. The need of accurate accounts followed on the operations of these joint-stock companies. Like many other trading companies, the East India Company in the first decade of its history obtained subscriptions for each voyage to the East. Part of this money was invested in merchandise, part was used to fit out the expedition, and part was retained in the form of cash. After the voyage was over, the proceeds thereof, and sometimes part of the merchandise itself, were divided among the adventurers in proportion to their subscriptions.

### The Professional Accountant

All that I have said so far forms a background for what we have now to learn about the professional accountant. In its original application, the term "accountancy" meant account keeping or bookkeeping, and "accountant" and "bookkeeper" were synonymous or interchangeable terms. With the growth and expansion of commercial organizations and the development of modern business methods, there has come, as in other fields, a division of labor in the accounting end of businesses and industries. A process of evolution has been going on, and the distinction between a bookkeeper and an accountant is now quite clear. Professor L. Dicksee, who died in 1932, and who during his forty years of accountancy practice and lecturing in London, England, contributed more to accounting literature than any other writer, expressed clearly the distinction between the bookkeeper and the accountant for the publishers of the *Encyclopedia Britannica*, when he said:

The term "accountant" is sometimes adopted by bookkeepers, but this is an erroneous application of the term; it properly describes those competent to design and control the systems of accounts required for the record of the multifarious and rapid transactions of trade and finance. It assumes the possession of a wide knowledge of the principles upon which accountancy is based, which may be shortly described as constituting a science by means of which all mercantile and financial transactions, whether in money or in money's worth, including operations completed and engagements undertaken to be fulfilled at once or in the future, however remote, may be recorded; and this science comprises a knowledge of the methods of preparing statistics, whether relating to finance or to any transactions or circumstances which can be stated by numeration, and of ascertaining or estimating on correct bases the cost of any operation whether in money, in commodities, in time, in life, or in any wasting property. Generally, accountancy may be described as being the science by means of which all operations, as far as they are capable of being shown in figures, are accurately recorded and their results ascertained and stated.

It should be noted that, as business and financial organizations are not stationary, but must adapt themselves to changing conditions, the science of accountancy by no means has reached the final stage in the great march of progress.

Though records exist of the development of the science of bookkeeping, very little is known of the origin of accountancy as a profession. The "professional" man is one who places his skill and learning at the disposal of the public for a reward or for fees, and his status is quite distinct from that of one who serves a single employer. Where there are references in ancient and medieval times to auditors, such references do not throw light upon the origin of the profession of accountancy, since the persons referred to were manifestly in the employment of an individual or body.

### Early Associations of Accountants

The first record of an association of accountants is that of the Collegio dei Raxonati, which was founded in Venice in 1581, but it is not certain whether its members were public accountants or only employees of financial and commercial organizations, who, like many bookkeepers and clerks in accounting offices today, group themselves for study and lecture purposes. There is evidence that in Milan, in 1742, the government established a scale of charges for accountants, but even this cannot be regarded as conclusive evidence that the practice of the professional or public accountant existed in that city.

The earliest-known instance of the employment of a professional accountant to make a special examination of a set of books and to report thereon is in the year 1721, when Charles Snell, of Foster Lane, London, who described himself as a "Writing Master and Accountant," was called upon to investigate the accounts of one of the directors of the notorious South Sea Company, the failure of which led to a great financial crisis in England and brought about the insolvency of many other "bubble" companies. This wholesale failure became popularly known as the "South Sea Bubble." But the day of the organized society of professional accountants and auditors had not yet arrived. As late as 1799, the names of only eleven firms of accountants were listed in the London directory; a half century at least had to elapse before the need of some organization for the mutual assistance of members and for the public good became manifest, and it was in the land of the Scot that the movement had its birth.

The oldest incorporated body of professional accountants in the English-speaking

world is the body of chartered accountants in Edinburgh, which was granted a Royal Charter on October 23, 1854. Then followed the formation, in Glasgow and Aberdeen, of other bodies of chartered accountants, which became incorporated in 1855 and 1867, respectively. While these associations of accountants were organizing in the North, there was not the same evidence of activity in organization in the South. The conditions necessary for the encouragement of organization in England, however, were present. As the development of home and foreign trade resulted in the evolution of types of organizations best suited to trading, so the growth of big business, the adoption of improved methods of manufacture and transit, and the need for special systems of accounts and methods of control made possible the growth of a profession for men having scientific knowledge and capacity of recording and investigating business transactions.

### Recognition of Need for Accountants

It was in the forties of the last century in particular, when vast amounts of capital were being invested in railways, and when speculative tendencies were taking hold of people, that the need for the accountant and the importance of his services to the public became manifest. The English Companies Act of 1862 encouraged the extension of his work both as liquidator and auditor. Every subsequent act recognized the importance of his services, and that of 1900 made provision for the appointment and remuneration of auditors and defined, in part, their rights and duties. It is of interest to know that the companies acts of the Dominion and of the Provinces are patterned largely after the Companies Act of England. In 1866, the professional accountant came into prominence in England, for in that year the banking house of Overend Gurney and Company went into bankruptcy, bringing about numerous other failures in London and causing the most serious commercial panic experienced in that city. The Bankruptcy Act of 1869 placed new duties on the accountants. The more prominent practitioners, seeing the advantage of an organized profession, formed themselves into a society that, in 1880, was granted a Royal Charter incorporating it as The Institute of Chartered Accountants in England and Wales. This institute is the largest organization of accountants in the world today, and has a membership of 10,142.

## Idea Exchange

Edited by HARRIET P. BANKER

*To encourage the exchange of helpful ideas, a two-year subscription to the BUSINESS EDUCATION WORLD will be awarded to each teacher whose contribution is accepted by the editor. Contributions should be short, and preferably illustrated.*

INSPIRED by the slogan, "Twelve New Words a Day Make Speed Building Play," I use the following plan in my shorthand speed-building classes:

Each day, twelve words are selected from the daily assignment in "Gregg Speed Building." The students type these twelve words in two columns at the top of a sheet of 8½ by 11 plain paper. A line is typed beside each word, and on this line the correct shorthand form is written in ink. The words are then memorized.

Next, each student types, on the same sheet, a letter containing all twelve words. Triple space is used to allow for writing in the correct shorthand forms beneath each line of type. These daily vocabulary-building assignments, when completed, are kept in loose-leaf binders.—*Willie Cora Rudder, Commercial Day School, Watkins Institute, Nashville, Tennessee.*

In order to encourage greater accuracy on the part of my typing pupils, I conceived the idea of establishing a "No Error Club."

First, I explain to the pupils that, in the game of golf, whenever a player makes a hole in one stroke he becomes a member of the Hole-in-One Club. In like manner, all typing pupils who write a ten-minute test without error automatically become members of the "No Error Club." Whenever a pupil qualifies for membership, his name is posted on the board. Marks for all additional ten-minute tests written without error are also placed beside the members' names.

As a motivating device, the plan has proved altogether satisfactory, for the membership list has grown to considerable length and includes the names of many pupils who previously did very inaccurate work.—*Florence E. Day, Southport (Indiana) High School.*

FOR a number of years I have used a Brief Form Learning Contest, which I think I may consider a success because of the ease with which the students master the brief forms.

The contest may be conducted as follows: Write at least two hundred brief forms in colored chalk on the blackboard, arranging them in a straight line as a border at the top of the blackboard. The brief forms, divided into groups of ten, may be written on the board a week before the contest and read in class daily.

I usually announce on some Monday morning that a contest will be held the following Friday. Captains are immediately chosen, and they, in turn, select their teams, preferably early in the week, so that they may have an opportunity to drill the members of their respective teams. The captains may drill their teams in reading the brief forms any time before class or after school.

On the day of the contest, each student draws a number, but does not reveal the number he has drawn. The two captains then go to the blackboard, each with a pointer in his hand. Captain No. 1 points to a group of ten brief forms and calls a number belonging to the opposing team. The student having this number reads the group of brief forms designated. If he succeeds, his team wins a point; if he fails, it is up to the captain of the opposite team to read the brief form missed by the student. If the opposite captain reads the form, the point is lost for the other team. If the captain fails, the captain of the player who missed has an opportunity to read. If he succeeds, the point is saved for his team and the original player is allowed to resume the reading of the group designated by captain No. 1.

The contest continues, the captains alternately calling numbers until all the numbers have been used. The side having the most points wins.—*Sister M. Alexius, Aquin High School, Freeport, Illinois.*

AS an incentive for doing better work, I have adopted the plan of posting on the bulletin board a tabulated report of the highest speeds attained in my third- and fourth-semester typing classes over a period of six weeks or longer.

We use the typing of the schedule as a class exercise by having one student dictate the data to the other students, who type the material direct from dictation. The plan thus has a four-fold purpose—motivation, and practice in enunciation, in direct dictation and tabulation, and in correct spelling of proper names.—*Irma Barkhausen, High School, Beaver Dam, Wisconsin.*

TO ease the seemingly endless task of recording each typing exercise turned in by my students, I devised the following plan, which has proved most satisfactory.

I assign work for at least a week, introducing

an incentive for each student to do his best by having the number of required exercises and permissible errors determined by the ranking of each pupil as an A, a B, or a C student.

Completed exercises are first checked by the student. The student's name, the number of the exercise, and the number of errors are recorded on the paper, which is placed on a shelf in a cabinet designated for this purpose. I take the exercises from the cabinet, check them for errors overlooked, and return them to the students, who may rewrite any exercise containing more errors than they care to have on their records. In such cases, the original copy is destroyed.

Individual folders are provided, in which each student places his corrected exercises. These folders are filed until the exercises are needed for the budget, at which time the exercises are removed from the file and arranged in proper order. A front page gives the name of the student, the total number of exercises, and the total number of errors in the budget. The budgets are turned in for grading, which I find I can do as quickly as an ordinary set of papers. The grade for the report card is based on the average grade in speed, technique in handling the machine, and the grade on the budget.—*Mrs. R. E. Dolan, High School, Taylor, Texas.*

FOR an economical turning-the-pages efficiency drill, I have my students utilize their old notebooks, instructing them to write on top of the old material and to use only the first and last half lines on the page.

As the dictation proceeds, the student will

write a half line at the top of the page, skip to the bottom, turn the page, start again at the top, skip to the bottom, and again turn the page. A quantity of dictation that would normally fill one page of the notebook will thus require the turning of twenty-five pages. Should a student wish to give himself additional private practice, he may write a portion of some prescribed sentence over and over again.

This concentrated practice brings skill and confidence and removes the haunting fear of turning the pages of the notebook under fire of long and rapid dictation that slows the hand and mind of many an advanced student.—*Otto Rhoades, Rhoades School for Secretaries, San Francisco, California.*

[An efficient method of turning the leaves of the notebook is described in "Gregg Speed Building" (page 38) as follows:

When you have filled all but the last two or three lines in the second column of the page, grasp the lower left-hand corner of the page between the first finger and the thumb of the left hand. At the moment you finish the last line, turn the page easily. Speed in turning the page is not necessary. Simply turn it in such a way as not to disturb your writing rhythm or distract your thought from the dictation.

The drill suggested by Mr. Rhoades could be varied, if desired, by having the students write over the old material in their books, starting about half way down the second column, and turning the pages by grasping the lower left-hand corner between the first finger and the thumb of the left hand as just described.—*Ed.*]

## Discussion of Current Problems

### \$100,000 for Conventions

In a recent radio address, President Roosevelt made the following statement: "It goes without saying that the quality of our teaching in almost every state of which I have knowledge can be definitely and distinctly raised."

Last year, commercial teachers, in the endeavor to improve the quality of their teaching, spent from \$75,000 to \$100,000 for conventions and conferences. National, regional, state, district, and city commercial education associations all held one or more meetings. In addition, several universities and teacher-training institutions held conferences on commercial education.

In these days, \$100,000 will buy quite a lot of education. What did it buy for commercial education in 1933? The present economic crisis in education makes it imperative that we ask ourselves this question at the beginning of the new year.

A most significant organization was effected during the meeting of the National Commercial Teachers' Federation held in Cincinnati, December, 1933, namely, the National Council of Business Education. The purpose of this organization is to set up standards and objectives in this field of education. It is hoped that every organization devoted to education for business will give its hearty cooperation to this council.

We should like to see the national and regional associations at least, and the state groups if they will, take a vote of their constituents before formulating their 1934 programs. Conduct the voting in such a way that the members may express their opinions with complete anonymity. In this way, the personnel responsible for convention program making will find out, for example, what the rank and file

think of the recent trend toward a strict adherence to general themes and editorial plans involving a series of yearbooks.

We all appreciate the many excellent advantages of such a scholarly editorial policy as that adopted by the Eastern Commercial Teachers Association in 1928, resulting in the publication of six yearbooks to date. May there not, however, be some disadvantages that could be easily removed, but that, if allowed to go unchecked, would tend to nullify the advantages?

Does this plan, which, for convenience, we shall call the "E. C. T. A. plan," put a damper on the originality and initiative of the majority of the members of the association? Does it preclude the consideration of current problems, which cannot afford to wait until they fit into a theme that has been scheduled for a meeting a year or two in the future or that was discussed at the last year's meeting? These are two of several questions that suggest themselves when one considers the dangers of the inflexible program.

The solution, if one is needed, is simple. All the valuable features of the "E. C. T. A. plan" may be retained, and the desired flexibility assured, by allotting a certain portion of each program for an informal discussion of subjects "off the record," with the *prepared paper* absolutely taboo.

Let us all submerge our individual interests, both personal and organization, for the larger interests of our field of education throughout the whole country.—*Irving R. Garbutt, Director, Commercial Education, Cincinnati, Ohio.*

## A Transcription Experiment

THOUGHT you might be interested in an experiment we began about the fourth week of school here at East Commerce High School.

It just happens that my lunch period is the same as that of most of my second-semester theory students, and it also happens that one of our typewriting rooms is available. You see, it is mostly "happenstance." Three times a week we meet in the typewriting room the first half of the lunch period, and for two or three minutes I dictate. The students are then given 11 minutes in which to transcribe as much as they can. Those who finish before the time is up, repeat from their notes. When the 11 minutes are up, we exchange and correct transcripts. They are marked the same as in an advanced class; that is, no transcript is acceptable if there is a sentence or grammatical error or a misspelled word and the percentage of accuracy must be at least 96.

Out of the 60 minutes a week that is given to this experiment, only 33 minutes is actual transcription time. The rate of transcription

ranges from 16 to 39 words a minute—the rate depending a great deal on the number of trips to the dictionary during the 11 minutes of transcription. Practically all the students in this class type consistently between 40 and 55 words a minute. I know this is one of the big reasons that the students are able to produce good transcriptions, for in all classes it is typewriting that disqualifies most transcripts.

To date, all the class have passed at least one 3-minute 60-word, new-material transcription. Seventy-five per cent of the C grade students and 94 per cent of the A and B grade students do consistently good work at this rate. Sixty per cent of the class have qualified on a 70-word dictation, and most of these same students can take 80-word dictation with comparative ease. Fifty-four per cent of the whole class have now in their possession, or are waiting to receive, the 60-word award earned on the November and December Gregg Transcription Tests and one girl has her 80-word Gregg Transcription award.

This experimental class has been an eye opener to me. As I see the possibilities of the course conducted in this manner, it makes me realize more than ever how little we know of the teaching of shorthand and typewriting. I believe we are in the infancy stage of learning. Anyway, these are some of the things we have discovered:

1. A student ought to be a good typist before entering the shorthand course. In other words, a good typewriting rate of speed should be a prerequisite to the shorthand course.

2. Transcription should be begun in the first semester of theory.

3. A little theory well learned is better than a lot of theory half learned.

4. Sentence and paragraph dictation fixes the theory better than isolated words.

5. Early transcription lends an incentive to both the typewriting and shorthand classes.

6. The real purpose of the course receives the proper emphasis through early transcription.

7. The standard of A and B students will be very much higher than it is now, and the C grade students will become better average stenographers in a shorter period of time.

At the end of the semester, I hope to have better results than this, but the time is short now, and what time is left is broken into so much that best results cannot be reached. But I believe we have made a beginning.

One of the teachers said we would cut ourselves out of jobs this way, but we are turning out far too many mediocre stenographers, and this plan will eliminate many very low-average stenographers.

When I get the term results, I will send you a copy, and if you think it is not worth continuing, I wish you would be frank and say so.—*Gertrude Bishop, East Commerce High School, Detroit, Mich.*

# Testing the Intelligence of Stenographers

By GERTRUDE WHITE

Shorthand Reporter, New York City

**W**HEN I came to New York to look for a job in the summer of 1925, I brought with me six years of secretarial experience. I had received my business training at Columbia University, and so I went at once to the employment agency at the University for a lead. Later, I applied for a job as secretary in one of the University offices.

Much to my surprise, I was told that, before anything definite could be decided, I would have to take an intelligence test. I never had had my intelligence tested, and though I was convinced I had as much of it as the next person, I decided it might be good to know just where I stood on I. Q.

## I Take a Test

The test was handed to me right then and there. The first three pages were fair enough, but when I turned to the fourth page, I found it contained problems and tests in mathematics. I had always hated arithmetic, and I decided that if the job entailed any mathematical ability, I didn't want the job. So I handed back the test with the fourth page unanswered.

As my prospective employer read over the first parts of the test, he looked quite pleased with my efforts, but when he reached the last part, he turned to me, "But why—"

"I don't like mathematics," I explained, "and I'm terribly slow at it. You wanted someone with bookkeeping knowledge?"

"No," came the answer. "As a matter of fact, I have a competent bookkeeper. I want a personal secretary. You could manage to keep a check book balanced, I suppose."

"Oh, yes," I laughed, "I could do that."

My test was rated—I never did find out my exact score—and I was hired. For a year everything went along beautifully. Then the bookkeeper got herself engaged, and gradually I found myself taking on her work. When she left to be married, six months later, I was practically an accountant. As a result, I had little or no respect for intelligence tests.

My respect was further lowered by an experience with a prospective stenographer to

whom I had to give the same test. She came in on a busy afternoon. She was utterly pleasing in personality and appearance, and presented the highest credentials. But she had to take the test. I explained the routine to her and, showing her into a smaller, quiet office, handed her the test.

## I Give a Test

"I'll come for your paper when your time is up," I told her, and then promptly forgot about her in the pressure of my own work.

Two hours later it dawned on me that there was a girl in the little office. I rushed in, and there she was reading over her answers, and beaming with self-satisfaction. "I think I've done pretty well," she smiled at me.

I managed a matter-of-fact "I'm sure you have," took her telephone number, and promised to call her the following day to let her know whether or not she was to be hired.

I then scored her test. She had achieved the top rating, of course. I pondered a while. She was such a pleasant girl, and her references and training sounded so good, I felt that she would have achieved a high rating even had she used only the properly allotted time. I decided to put the scoring through and keep my guilty secret. My employer was delighted: "An exceptional achievement! Let's not lose her. Call her and have her report on Monday."

The girl was a success from the moment she began work. She wasn't overintelligent, but she was a well-educated, secretarially experienced girl, and knew what to do, and when, and how to do it. We found nothing wrong with her, and she continued successfully until she, too, got married.

Since then I have hired and fired a great many girls, but *without* the aid of tests. I don't think one needs to talk to a prospective stenographer over fifteen minutes without getting a pretty good measure of her fitness. I can't see how it would help any secretarial purpose for a girl to know whether the word "orifice," for instance, meant opening, prayer, dawn, or deceit. The smallest office is equipped with a dictionary and an encyclopa-

dia, and most offices carry secretarial handbooks and a Roget's Thesaurus. And a girl is seldom so rushed that she hasn't the time to look up the meaning or spelling of the less-used words.

Another case where a test proved worthless in determining intelligence was when I lent two of my best secretaries to help out on a scoring job. The head of that department thought it advisable to have the girls take the test so that they would know exactly what they were doing. Both girls floundered miserably, and their scores were much below their intelligence capacity. Which might prove, of course, that neither girl was capable of immediate adjustment; but outside of that, I don't see what it proved, since they became efficient scorers within an hour.

One of the largest department stores in the city tests all prospective employees, whether they are candidates for managing positions or for the job of bundle wrapper. I never saw a bundle wrapper yet who didn't look just like a bundle wrapper, and it would seem to me that all this testing is superfluous.

I don't know exactly just how much of



this testing goes on, but I know there must be a great amount of it, because I was once in a printing office where such tests are printed. There were millions of them, ready to be shipped to various educational and business employment offices.

John Dewey's "Learning by Doing" is one of the strongest planks of the educational platform. Would not "testing by doing" be just as effective?

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## Advance Information About the Eastern Commercial Teachers Association Convention

**Date:** March 29, 30, 31.

**Place:** Hotel Statler, Boston.

**Theme:** Business Education in a Changing Economic and Social Order.

**Officers:** President, John F. Robinson; Vice President, Mrs. Frances Doub North; Secretary, Harry I. Good; Treasurer, Arnold M. Lloyd; Editor Yearbook, Catherine F. Nulty.

**Committee Chairmen:** Program, Atlee L. Percy; Membership, Walter E. Leidner; Publicity, Louis J. Fish; Hospitality, George L. Hoffacker.

**Program:** An advance program will be published in the March issue of the *Business Education World*. The time schedule of meetings follows:

Thursday, March 29: Registration and sightseeing; 8 p. m., opening session; 10 p. m., dancing.

Friday, March 30: 9:30 a. m., general session; 10:15 a. m., section meetings; afternoon and evening, pleasure trips, dinners, theater parties, etc.

Saturday, March 31: 9 a. m., business meeting; 9:45 a. m., section conferences on the subject, "Everyday Problems of the Classroom Teacher"; 11:30 a. m., general session; 1:00 p. m., Good-fellowship dinner, closing the convention.

**Association's Medal of Honor:** Awarded to Dr. Edward J. McNamara, New York City. Presentation will be made at the close of the dinner Saturday.

# Report of the Thirty-Sixth Annual Convention of the National Commercial Teachers Federation

The Netherland Plaza Hotel, Cincinnati, Ohio, December 27-29

THE Cincinnati meeting has come and gone with the Christmas holidays and the never-to-be-forgotten howling blizzard and below-zero weather that kept many delegates at home.

And yet, housed in the palatial and super-comfortable Netherland Plaza, and presided over by two charming hostesses, our president, Miss Eleanor Skimin, from the North, and our second vice president, Miss Ray Abrams, from the South, the delegates had one of the most enjoyable and professionally beneficial meetings in the history of the Association.

Secretary Gates reported that the attendance at the end of the second day was larger than that at the Chicago meeting the year before. The attendance at the 1932 Chicago meeting was 430, and the 440 mark was passed on the second day of the Cincinnati meeting.

## Address of Welcome

The convention was officially opened by President Skimin Thursday morning in the hotel's famous Hall of Mirrors. Dr. Edward D. Roberts, superintendent of the Cincinnati public schools, welcomed the delegates and described the educational development of this city of seven hills during the past century. He called particular attention to Cincinnati's comprehensive business education program under the guidance of Director Irving R. Garbutt.

He stressed the city's cultural progress, instancing its world-famous Symphony Orchestra and the municipal university, the first of its kind and the model for similar institutions elsewhere. Against this background, he said, and on the firm foundation of practical, cultural, and spiritual values, there has been built an educational enterprise alive to the need of a diversified education program.

The response to the address of welcome was most appropriately made by J. Murray Hill.

Miss Skimin, the first woman to be president since the Federation was organized thirty-six years ago, set a model in business efficiency that succeeding presiding officers will

find it difficult to equal. From the first stroke of her gavel opening the convention until its last scheduled event, Friday night's banquet, all meetings opened and closed on time and the delegates were neither aware of, nor incon-



ELEANOR SKIMIN

venienced by, last-minute details which have a faculty for going wrong and prematurely graying the hair of convention chairmen.

## The President's Address

A summary of Miss Skimin's address at the opening session will be found on page 319.

## Nationalistic Spirit Menacing Education

Rabbi James G. Heller, Isaac M. Wise Temple, Cincinnati, speaking on the subject of democracy in education, pointed out that the growing nationalistic spirit, stimulated by the governmental tendency toward dictatorship, is menacing the freedom of the mind that has been man's heritage since the Renaissance. He exhorted the members of the Association to combat this menace by maintaining and teaching an eternal vigilance that we shall not catch the contagion of this new trend in human affairs.



DR. E. M. HULL  
N. C. T. F. President for 1934

Democracy is the supreme form of human optimism, and it supposes man capable of governing himself.

Democracy has raised the general level of humanity. The democratic philosophy of the eighteenth century remains one of the great enunciations of the human spirit. Its weakness perhaps lay in the fact that its possibilities were exaggerated in its rediscovery. Today, consequently, because democracy has not achieved Utopia, and because we are rapidly approaching what appears to be a climax in history, we find democracy being questioned everywhere.

#### Beware Our New Prophets

The rise of dictatorship is not alone responsible for this. Men are listening to old ideas with weary ears; they are tending to vest increasing power in the executive form of government and are lending ready ears to talk of autocracy, and autocracy depends, as Machiavelli, the Florentine statesman, pointed out, on keeping the masses in ignorance.

The eighteenth century age of enlightenment realized that if democracy was to succeed, it must be accompanied by education, since men cannot govern themselves efficiently without being educated to do so.

The prophets of the new day condemn faith in democracy, preaching that the masses must be led. This is tantamount to condemning human education. Instead of faith in the human will, they preach unquestioned obedience as the watchword of the future. Thus the portals of democratic liberty, such as freedom of the press, of minority groups, and of

religious and academic freedom, are closed and the way is open for dragooning of the schools.

As teachers, this trend is of enormous significance to you. If it continues, we may anticipate a steady disintegration of popular education, finding in its stead a system calculated only to make good robots. Standardization will be complete, there will be no free thought and no dissent. Education will degenerate into a sort of patriotic drill for the purpose of glorifying the State.

#### Teachers Have Part

In this period so menacing to education, we must rededicate ourselves to the ideal of democracy if we are to avoid the advent of another dark age. In this rededication you, as teachers, must play the largest part; on no group can this responsibility fall more heavily than on the educators.

#### The Federation Breakfast

The Federation breakfast Friday morning was an innovation, for which the appreciative thanks of the convention are due President Skimin. It was a delightful affair presided over by Miss Ray Abrams, of New Orleans, of whom Dr. Gregg said: "She is a unique figure in education. She is principal of a high school with thirty-five men on the faculty and over one thousand boys in attendance. She has brought with her a breath of that happy, sunny southland to this breakfast this morning."

Earl Barnhart called the attention of the members to the small Christmas trees decorating each table. Each tree was a seed cone of a magnolia tree. The cones had been gathered and silvered by the boys in Miss Abrams' school. Artificial seeds of red paper had been thrust in each cone, making a most realistic effect. Under each tree was a sample package of New Orleans famous pecan pralines—both gifts from Miss Abrams.

#### Looking Ahead 100 Years

In keeping with the convention theme, Miss Abrams announced the subject of the breakfast talks as "Looking Ahead 50 or 100 Years," and told the speakers to feel free to treat the subject humorously or seriously, whichever they preferred. She, herself, chose the humorous phases of the subject, and ventured the suggestion that commercial education may be one of the unnecessary activities of the future.



MARGUERITE D. FOWLER  
Second Vice President

J. MURRAY HILL  
Treasurer

BRUCE F. GATES  
Secretary

W. A. ROBBINS  
First Vice President

Miss Abrams then called on Edward J. McNamara, Earl W. Barnhart, John F. Robinson and W. M. Roberts for their prophecies. They replied as follows:

**Edward J. McNamara**

I hope that in those distant days we shall have presidents and vice presidents such as we have this year. If commercial education continues for the next 100 years in the direction it is now going, I want to live that long, so that I may continue to enjoy this most enjoyable association.

**Earl W. Barnhart**

Within twenty years, there will be a very extensive teaching of shorthand for personal use in this country. At the end of an 80-hour course, young people will be able to write ordinary matter at 100 words a minute. The greatest usefulness of shorthand will be its personal usefulness. We must have a faster writing method than the longhand we use today.

I can also see typing being much more extensively used. Manufacturers are producing cheaper machines. Within twenty years the bulk of our people will be using typewriters. You will learn typewriting by procedures quite different from those of today.

From a vocational viewpoint, we shall always have transcribing. Human thought must be set down.

We are going to have a broader program—one that will train young people for grocery stores, millinery shops, and all kinds of commercial vocations. The number of clerical workers has doubled in the past twenty years. Management must have more data, and this

means more clerical workers to collect them. Comparatively few manufacturers have worthwhile cost accounting systems. The extension of cost accounting and the growth in the number of clerks will be accompanied by more elaborate mechanical devices.

The greatest change, however, is the one that the present economic condition is fostering. Thirty years from today we are going to train boys and girls definitely in the art of getting along with people. We are going to teach more about business to everybody—more successful participation in our economic life, so that there will be more true prophets and less false profits.

The depression of the early nineties was followed by the enormous expansion of high schools in this country. The depression of 1907-1908 preceded the birth of the junior high school. The depression of 1920-1921 preceded the birth of the junior college. What will come out of this depression? I see commercial education expanding more rapidly than it has ever expanded in any other period in the history of this country.

**John F. Robinson**

Fifty years hence, I see a great national organization of business educators, who will see to it that their educational plans have some of that unity that our second vice president spoke of a moment ago and that we continue to progress until we stand where we belong—as one of the great groups of educators in the United States.

**W. M. Roberts**

I am happy to see that we have a lady chairman this morning. You know in Texas we are governed by a lady.

I am not interested in what will happen 50 or 100 years from now. I am interested in the present. A sales manager for a national concern told us in Texas that too many of us were admitting that we were whipped. His salesmen in our state kept reporting that they could not get any orders. He decided to investigate for himself, and to try out the following interesting experiment.

He took ten of his men to Abilene and gave each one a \$10 bill, with the following instructions:

"Go into the first store you come to and offer to buy some small article. After you pay for it, if the clerk suggests that you buy something else, go ahead and buy it. Continue in this fashion until you spend the entire \$10."

One man went in a store and asked for a package of razor blades. The clerk filled the order and made no effort to sell him anything else.

Another man at another store asked for a pocketknife. The clerk handed him a knife and his change, and the man walked out.

When the ten men reported back to the sales manager, they had spent, altogether, \$6.75 out of the \$100 he had given them. So much for Abilene.

They tried the same experiment in Tyler, where they spent \$11.25; and in Amarillo, where they got rid of the handsome sum of \$9.25.

Apathy, pure laziness, on the part of the clerks, who were just machines behind the counter!

Now, just a word regarding the topic assigned to me this morning. I think that in 1950 commercial education will be given to us in capsules.

### Dr. Gregg's Report

Miss Abrams, in introducing the next speaker, said: "I have asked Dr. Gregg to give us some reminiscences of the Congress of the World Federation of Education Associations held in Dublin this year. As you know, he was our representative at the Congress. Having a representative at that meeting gave our association an enviable professional standing. To have Dr. Gregg as our representative gives us still higher recognition. We feel that in presenting Dr. Gregg to you we are presenting the dean of commercial education in the United States."

In harmony with the wishes of the Chairman, Dr. Gregg's report was largely humorous and descriptive. After a tribute to Miss Abrams, quoted elsewhere, he said:

"When Americans attended international educational congresses, they were more inter-

ested in the ceremonial and picturesque aspects of the meetings than in the actual proceedings. After all, many of the topics in the programs were not of much value to our teachers; for example, the methods of teaching foreign languages is given a foremost place. Europeans are astonished when they are told that the teaching of foreign languages is not included in our commercial departments or business schools. When I said this to a distinguished educator, he actually went to other Americans to have my statement confirmed—he simply couldn't believe it.

"There are several of those present today who have attended international gatherings who will bear me out that the stage settings, if I may use that expression, for the meetings over there are not only interesting but impressive. The formal procession of dignitaries to the platform, in their ermine robes and chains of office, with their attendants in colorful uniforms, is interesting in itself. One lady whispered to me in the midst of one of these processions, 'Oh, what lovely whiskers they have.'

"The next impression, I think, is a feeling of amazement at the lavish hospitality extended to the visitors, and the kind attentions shown by everyone to the visitors, wherever they may go. My friend, Clay Slinker, and others, will remember gratefully the extraordinary hospitality extended to us at Amsterdam, and others will have vivid recollections of similar kindnesses at the International Congress in London last year. One explanation of the lavish hospitality is the fact that the governments and municipalities make large appropriations for the entertainment of guests; but apart from this, there seems to be a desire on the part of all the citizens to give visitors a favorable impression by rendering service and attention.

"But I must give some particulars of the Congress of the World Federation of Education Associations held in Dublin last July.

### Organization of World Federation

"The World Federation of Education Associations movement was originated by the N. E. A. in 1922. A committee was appointed that year to devise a plan by which world peace might be promoted through education. The committee called a meeting in San Francisco in 1923, which was attended by about six hundred representatives from

various countries. These representatives formed the World Federation of Education Associations. They took for their motto, 'World Peace Through Education.' Since that year, the following meetings have been held biennially: 1925, Edinburgh; 1927, Toronto; 1929, Geneva; 1931, Denver; 1933, Dublin.

"The attendance at the Dublin meeting was about 1,500—representing about forty nations. There were about 100 delegates from the United States.

### Irish Hospitality

"Mrs. Gregg and I arrived at Dublin on a Friday preceding the opening of the convention. When we landed at Dun Laoghaire, formerly known as Kingstown, which is about 10 miles from Dublin, we found some representatives of the Education Department there to meet us. When our baggage was collected, one of the gentlemen spoke to the chief inspector, and he passed all the baggage without opening it. This was a fine sample of Irish hospitality—I wish someone would do that when I land in New York sometime!"

"As we left the dock escorted by Dr. John Burke, Inspector of Commercial Education for the Irish Free State, there came a wild cheer from a motor bus. It seems that fifty commercial teachers attending the summer training courses had adjourned their meeting, hired the motor bus, and had come down to greet us. They loaded us into their car, and started to sing all the good old Irish songs, beginning with 'Come Back to Erin.'

"The next evening a reception supper and dance for the delegates was given at the Gresham Hotel. It was attended by the Lord Mayor of Dublin. The Lord Mayor, Alfred Byrne, is a great character—a dapper, alert little man, with a pointed, waxed mustache, he looks like a Frenchman—who has been Mayor of Dublin for many successive terms. He has the reputation of having shaken hands with more people than any other man in the world, and of being able to call almost everyone in Dublin by his first name.

### An Amusing Incident

"In this connection I recall an amusing incident at the reception. One of the lady delegates from Philadelphia, on being introduced to the Lord Mayor, said: 'I don't know the proper way to address a Lord Mayor. Will you please tell me?'

"'Call me Alfred,' said the Lord Mayor.

"'Oh, that is easy, because my brother's name is Alfred.'

"'Then call me Alfie—may I have this dance?' He then took the magnificent chain of office and threw it over her shoulders and away they went.

"Monday evening we had the opening meeting, presided over by Dr. Paul Monroe. Dr. Monroe, you will recall, was formerly a member of the faculty of Columbia University. He is now the president of the famous girls' college at Constantinople. Dr. Monroe made a splendid address, stating the purposes of the Federation, the good work accomplished, and paid a tribute to Dublin hospitality. President Eamon de Valera delivered a scholarly address of welcome, followed by the Lord Mayor and representatives of the various nations. Every American swelled with pride when Mrs. Ruth Bryan Owen, our Minister to Denmark, was introduced. She was so beautiful, so talented and witty, with such a charming manner and voice, and with it all so delightfully feminine—oh, well, we were immensely proud of her.

"Wednesday afternoon we attended a reception given by the president of the Irish Free State and members of the Cabinet at the Vice Regal Lodge. Over two thousand people were present. It was a very wonderful and colorful event.

"There were many other enjoyable occasions, a reception given by the American Minister, Mr. Sterling; a reception and dance at the Mansion House, by the Lord Mayor, attended by Mr. Cosgrave, former president of the Irish Free State, to whose political party the Lord Mayor belongs; and many others. There was also a delightful afternoon reception and tea to American delegates given by my old friend, Mr. Balch, the American Consul General, and his charming wife.

### Commercial Section Meeting

"The commercial section began with a luncheon presided over by Mrs. Frances Moon Butts, of Washington, D. C. So many distinguished visitors were introduced, including Mrs. Owen and the Lord Mayor, that there was little time left for the formal program. Brief addresses, however, were given by Mr. Beresford Ingram on commercial education in England, by the talented and witty Dr. John Burke on commercial education in the Irish Free State, and by Mr. Irving R. Garbutt of Cincinnati on 'What's on the Next Page in

### Social Adjustment of Education for Business?

"Incidentally, the latter was so interesting that, as the time for it was limited, Mr. Garbutt was asked to give it again at the next session, so that it might be fully discussed. Dr. Burke's report was interesting as showing the remarkable progress made in the development of technical and commercial education in all parts of the Irish Free State. The government is appropriating large sums of money for the establishment of schools in which practical instruction and training are given in agriculture, the manual arts, and commercial subjects.

"The closing session of the commercial section was devoted largely to addresses by foreign delegates."

### Business Meeting

At the close of Dr. Gregg's talk, Miss Abrams turned the gavel over to President Skimin, who conducted a short business meeting, at which the following officers were elected for the ensuing year.

### Federation Officers for 1934

*President:* Dr. E. M. Hull, president, Banks College, Philadelphia, Pennsylvania.

*First Vice President:* W. A. Robbins, president, Lincoln School of Commerce, Lincoln, Nebraska.

*Second Vice President:* Mrs. Marguerite D. Fowler, curriculum builder, secondary schools, Louisville, Kentucky.

*Secretary:* Bruce Gates, president, Gates College, Waterloo, Iowa.

*Treasurer:* J. Murray Hill, vice president, Bowling Green Business University, Bowling Green, Kentucky.

*Executive Board:* *President:* Dr. E. M. Hull; *Past President:* Eleanor Skimin, Northern High School, Detroit, Michigan; *Representing the Public Schools:* Ivan E. Chapman, principal, Western High School, Detroit, Michigan; *Representing the Private Schools:* H. M. Owen, president, Brown's Business College, Decatur, Illinois.

### Department and Round Table Officers

#### PUBLIC SCHOOLS DEPARTMENT

*President:* W. O. Yoder, High School, Kenosha, Wisconsin.

*Vice President:* W. S. Barnhart, Director of Commercial Department, Emmerich Manual Training High School, Indianapolis, Indiana.

*Secretary:* Helen Frankland, Hume-Fogg High School, Nashville, Tennessee.

#### PRIVATE SCHOOLS DEPARTMENT

*President:* W. S. Sanford, Sanford-Brown Business College, St. Louis, Missouri.

<sup>1</sup>A summary of Mr. Garbutt's address appears on page 291.

*Vice President:* C. C. McCann, McCann School, Reading, Pennsylvania.

*Secretary:* Mrs. Marjorie Phillips, Phillips Business College, Lynchburg, West Virginia.

### SHORTHAND AND TYPEWRITING ROUND TABLE

*Chairman:* R. G. Cole, Abilene High School, Abilene, Texas.

*Vice Chairman:* Mary Alletta Dodd, Central High School, Springfield, Illinois.

*Secretary:* Dora H. Pitts, Western High School, Detroit, Michigan.

### BUSINESS ROUND TABLE

*Chairman:* Harlan J. Randall, State Teachers College, Whitewater, Wisconsin.

*Vice Chairman:* Don J. Blankenship, Ceredo-Kenova High School, Kenova, West Virginia.

*Secretary:* William Reichbauer, Glenwood High School, New Boston, Ohio.

### COLLEGE INSTRUCTORS ROUND TABLE

*Chairman:* Dr. Clyde Beighey, Head, Department of Education, State Teachers College, Macomb, Illinois.

*Vice Chairman:* R. F. Webb, State Teachers College, Indiana, Pennsylvania.

*Secretary:* Frances Botsford, Ball State Teachers College, Muncie, Indiana.

### BUSINESS MACHINES ROUND TABLE

*Chairman:* Agnes E. Meehan, George Washington High School, Indianapolis, Indiana.

*Secretary:* Louise Bennett, High School, Dunkirk, New York.

[A full report of the Department and Round Table meetings will appear in the March issue.  
—Ed.]

### Federation Banquet

The convention closed Friday evening with the annual Federation banquet and dance. Mr. George E. McClellan, who throughout the entire convention had so ably assisted Mr. Garbutt as chairman of the local committee in caring for the delegates, was toastmaster. The Federation is to be congratulated for having within its own ranks such a versatile and happy personality.

The address of the evening was made by J. O. Malott. In the opinion of Mr. Malott, who is now connected with the Federal Emergency Board, Washington, the depression will prove beneficial to education within the next few years.

Teachers and professors, who, before the depression, were interested only in the literary and academic side of education, have been taught for the first time the relation between education and business in general.

They are aware of this, because they have been affected personally with salary reductions

averaging 14 per cent, and, as a result, realize the necessity of training pupils to meet economic, industrial, and civic situations heretofore overlooked.

This change of attitude on the part of teachers will result in their training children to manage home budgets, interest themselves in local civic affairs, and in some way merge their school studies with commercial and industrial enterprises.

As a result, the school system under the recovery program will be an era of commercial and industrial education, replacing the era of literary education.

### Chicago Next Year

President Skimin announced that the next meeting of the Federation would be held in Chicago.

## President Skimin's Address

**W**E are living in an era of planning—planning for business and industrial recovery—planning for national development—planning for a better-organized economic structure. In all this planning, education has thus far had but minor consideration. Perhaps least of all has been said or done about planning in the field of business education. Yet, in this field of education, possibly more than in any other, there is need for planning, for this phase of education, a most important one, is an immediate and intimate part of our economic structure.

In all forms of planning, purposes are a first consideration. We must squarely face the question, "What are the purposes we wish to achieve?" They are that we should equip students of business education with a number of basic business principles and practices which will emphasize proper attitudes and wholesome interests. We should give them correct habits of thinking, of honesty, of faithfulness to job and duty; and we should impart a deeper understanding of the obligations and relationships of each citizen and worker.

### Revision of Traditional and Imitative Business Curriculum Needed

One of the most serious handicaps under which business education has suffered has been a lack of clear thinking about specialization. Institutions have developed, not because they saw clearly a task to do which

no other institution was doing, but because they saw an opportunity to imitate what some other school was already doing. In the beginning, business education was more or less of an apprenticeship course.

The first clearly marked specialized institution was the business college. Later, in 1890, the public high schools, which had been growing rapidly in numbers of students, became conscious of a field of work into which they might expand.

The enrollment of high school pupils doubled in the twelve years between 1921 and 1933. Such a phenomenal change in size and character of high school enrollment created many problems—adjustments in teaching, in pupil achievements, in teaching methods, in classroom management, and similar instructional problems. We, as commercial teachers, have been so busy in the field of vocational business education that we have not taken time to realize fully the possibilities of business education on a secondary level in terms of social and economic citizenship. Courses in business education in the high schools of the United States furnish any number of instances of imitation of one another. An attitude of *laissez faire* has continued. If we are to alter this condition, we need to break with the traditional and imitative business curriculum of the past.

There are some things that we can do in preparation for the changed conditions that we shall certainly face.

### Curriculum Should Include Social-Business Subjects

The question naturally arises what social-business subjects should be included in a well-rounded curriculum. This can well be answered by analyzing the social activities of business. Unfortunately, many educators ignore the fact that business is a social activity, and limit their commercial curriculum to clerical subjects. They do not seem to realize that, without the social phase of business, especially buying and selling, there is no need to keep books, to write shorthand, and to operate typewriters and other office machines. The placing of greater emphasis upon social subjects, however, need not mean a slighting of the more purely vocational subjects. It is possible to acquire a social attitude toward business and still become an efficient accountant, a rapid and accurate stenographer, or a skilled operator of an office machine.

What is necessary, then, is not to eliminate the clerical subjects or to tear down the standards of achievements in them, but to raise the level of the social-business subjects. Since the economic aspect of life under modern conditions has become so complex, it becomes necessary that much of our work be devoted to developing an understanding and appreciation of the various economic factors and relations involved in this complex living. Schools may well broaden their offerings to carry, in addition to specific vocational subjects, a considerable part of this wider economic education.

### Need of Leadership

In the teaching of commercial subjects, as in any other undertaking involving thousands of teachers, there is need of leadership. This, obviously, is necessary, so that standards may be raised, activities coordinated, basic objectives kept constantly in mind, so that we may profit by the study and industry of those peculiarly fitted to make this contribution. At this moment, we do not know what the outcome of Federal economies will be. The importance of business education makes it imperative that this branch be adequately represented in the United States Office of Education in Washington.

From the standpoint of what the states are doing, it is interesting to note that, even though more than one-half of the pupils enrolled in high schools in 1930 were taking courses in business education, there were only four state supervisors of business education. In only twenty of our cities are there directors or supervisors of business education. Perhaps our commercial teachers associations can be more helpful in setting up supervisory standards and in bringing them to the attention of school authorities. Commercial teachers have done much in recent years to bring about an increased effectiveness through the organization of local and regional associations. Carefully planned programs have been arranged that have been recognized as authoritative and at the same time very much worth while.

### Future of the Federation

At this point, I want to speak about our own federation. This year's program has been carefully organized with the central idea or

general theme of "Planning for the Future in Education for Business," with discussions on the social and economic phases of business education. It is fairly certain that next year's program will see a continued interest in social-business subjects. Discussions might be arranged on economic geography, social-business aspects of arithmetic and bookkeeping, commercial law, selling and marketing, business machines, and economic citizenship.

This is a day for cooperation between all commercial teacher groups—private, public, and college. The Executive Committee has been very consistent in urging all the departmental round-table chairmen to produce programs in keeping with the keynote of the meeting. The Executive Committee maintains that we are a professional association and, therefore, we must continue to see to it that no department or round table becomes a proving ground for the promotion of books, machines, appliances, or equipment.

From the very first, it has been my desire that our federation might serve its members this year by publishing at the earliest possible moment the addresses made and papers read at this meeting. It seems to me that there might be a program council selected which would work with the chairmen to plan and to integrate the program in the light of the needs of the day.

### Programs of the Future

Undoubtedly, the greatest programs to be made by commercial teachers associations will be accomplished through special committees, studying intensively throughout the year the problems assigned to them. Perhaps the convention of the future will consist less of papers prepared by individuals and more of reports of committees that have given intense study and thought to the major problems of business education. Perhaps we will have more programs that will involve the clinical type of analyses.

It is obvious that our work in business education must be built up in terms of purposes and social needs of the consumer. With a superior program of business education, a superior type of business teacher will be needed. The teacher of tomorrow will be engaged in the development of more efficient men and women, with emphasis on character as well as on skill. With a nobler professional attitude and leadership, a new era in business education is bound to come.

## National Council of Business Education

**A**T the convention of the National Commercial Teachers Federation, held December 27-29, 1933, at the Netherland Plaza Hotel, Cincinnati, Ohio, a National Council of Business Education was organized to represent the 35,000 teachers of business subjects throughout the United States.

The meeting was attended by delegates from all parts of the country, and was presided over by Dr. Edward J. McNamara, principal of the High School of Commerce, New York City.

This meeting was the outgrowth of a preliminary meeting held at the Eastern Commercial Teachers Association in Washington last year, at which Dr. McNamara was elected temporary chairman and Miss Eleanor Skimin, Northern High School, Detroit, Michigan, secretary.

Dr. McNamara was authorized at that meeting to extend an invitation to regional commercial education associations to send delegates to the National Commercial Teachers Federation meeting at Cincinnati for the purpose of considering the formation of a permanent organization.

### Organizations Represented

As the result of this invitation, the following organizations sent official delegates to the Cincinnati meeting:

National Commercial Teachers Federation: Eleanor Skimin, Northern High School, Detroit.

National Education Association Department of Business Education: Helen Reynolds, professor of education, Ohio State University; Dr. Herbert A. Tonner, assistant professor of education, New York University.

National Association of Commercial Teacher Training Institutions: Dr. William R. Odell, associate in commercial education, Teachers College, Columbia University.

Eastern Commercial Teachers Association: Dr. Edward J. McNamara; John F. Robinson, Burdett College, Boston.

Inland Empire Education Association, Commercial Section: Dr. Gordon F. Cadisch, director, School of Business Administration, State College of Washington, Pullman.

Tri-State Commercial Education Association: R. F. Webb, State Teachers College, Indiana, Pennsylvania.

Southern California Commercial Teachers Association: Albert E. Bullock, in charge of commercial education, Los Angeles City Schools.

Commercial Education Association of New York City and Vicinity: Simon J. Jason, Walton High School, New York.

Dr. McNamara invited a number of commercial educators to join the delegates in a

discussion meeting prior to the organization meeting, so that the delegates could sense the general sentiment for and against the proposed Council, and also the reactions toward the proposed machinery by which the Council should be formed and conducted. Those invited to join the delegates in the discussion were:

Irving R. Garbutt, Clay D. Slinker, Ray Abrams, Dr. John R. Gregg, Gertrude C. Ford, Dr. Elmer G. Miller, Dr. E. G. Blackstone, B. Frank Kyker, Jay W. Miller, J. L. Holtsclaw, Charles G. Reigner, M. E. Studebaker, R. G. Walters, Paul A. Carlson, Paul O. Selby, Earl W. Barnhart, and John O. Malott.

After hearing the viewpoints of these educators from all parts of the country, the delegates proceeded to organize the National Council along lines that would be most likely to meet the general approval of all those interested in the welfare of commercial education.

### Purpose of National Council

The purpose of the National Council, as set forth in the constitution and by-laws, is:

To study the best means of having business education contribute most effectively to the educational preparation of our people. This will be done by having the Council take an active participation in all efforts to improve education, by coordinating the efforts of affiliated organizations of commercial teachers for the advancement and development of teaching business subjects, and by providing for the expression of the point of view of commercial teachers throughout the country.

### Officers of National Council

The officers elected were:

President: Clay D. Slinker, director of commercial education, Des Moines, Iowa.

Vice President: Dr. Paul S. Lomax, professor of education, New York University.

Secretary: Helen Reynolds.

Treasurer: Albert E. Bullock.

### President Slinker's Statement

In discussing the formation of this Council, President Slinker said:

During the past several years, commercial education has been at a disadvantage in securing recognition and adequate representation up-

on committees appointed by the Federal Government and other groups for the investigation of various phases of education. This disadvantage arose largely from the fact that there was no national organization coordinating the efforts of our various associations to which these people could turn that could speak for those represented in the ranks of our work.

After more than a quarter of a century during which commercial education has been experimented with in public and private schools, there is great need for a definite statement of the philosophy of commercial education. Such a philosophy should not be parochial or regional. It should represent the best thought of the leading representatives of our commercial institutions throughout the entire country. A medium for correlating and crystallizing the best thought of those engaged in this work can be established through the National Council of Business Education.

There are problems dealing with curriculum adjustment and a shifting of the emphasis upon teaching methods constantly taking place. Under the stimulus of a National Council of Business Education, these matters can be more readily brought to the attention of commercial teachers throughout the entire country for evaluation and discussion.

On many occasions, commercial education has been attacked in books, newspapers, or pamphlets by those who have no sympathy with it, who are ill informed about it, or who are, for ulterior reasons, opposed to it. Such attacks are seldom answered, and the public is left with a distorted point of view with regard to the work in which we are engaged. A National Council of Business Education should see to it that such misrepresentations are corrected and constructive efforts are made in the interest of commercial education for increased recognition and prestige.

#### Potential Value of Council Tremendous

There are many things that might engage the attention of a National Council of Business Education. Among them are:

1. Providing means of cooperation among the numerous organizations dealing with problems and practices in business education with a view to clarifying its meanings and objectives.
2. To disseminate through conferences, addresses, and published articles, information as to the social, civic, and economic-vocational values of general and special business courses.
3. The dissemination of information showing educational and economic values of supervision of business education with a view to aiding in placing in state departments of education and in the larger city school systems persons qualified to exercise wise and capable guidance.
4. Through cooperation of member organizations, to promote more uniform educational

programs and, to this end, to petition the National Office of Education to reestablish expert leadership for business education at Federal headquarters.

#### Congratulations Extended

We extend our congratulations to the group of commercial educators who, under the leadership of Dr. McNamara, have brought to our profession a new dignity, an inspiring breadth of vision, and a cheering unity of purpose. We bespeak for the Council your whole-hearted support. Through the *Business Education World* you will be kept fully informed of all its activities.

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#### Private School Code Status

DURING the meeting of the National Commercial Teachers Federation at Cincinnati, the status of the proposed private school code was discussed by a group of private school people. No action was taken, because the Federal Government had not issued a ruling on the status of this code.

#### Southwestern Private Schools

THE fifth annual meeting of the Southwestern Private Commercial Schools Association was held at Dallas, Texas, November 25, 1933. Nearly every business school in the states of Texas, Oklahoma, Louisiana, and Arkansas was represented by one or more members.

The purpose of the meeting, as outlined by President George A. Meadows, was to discuss and take some form of action on the proposed code for private business schools that was drafted in Washington, November 13. W. M. Roberts, of the Tyler Commercial College, Tyler, Texas, and C. M. Stone, of Hill's Business College, Oklahoma City, represented this organization at the Washington meeting.

The following committee was appointed to work with the national code committee:

J. D. Miracle, Draughon's Business College, Abilene, Texas; L. T. Nichols, Draughon's Business College, Oklahoma City; and W. M. Roberts.

The following officers were reelected for the ensuing year:

*President: George A. Meadows, Shreveport, Louisiana; Vice President: C. M. Stone, Oklahoma City, Oklahoma; Secretary-Treasurer: A. N. Beasley, San Antonio, Texas.*

## Cleveland Program of N. A. C. T. T. I.

THE Seventh Annual Convention of the National Association of Commercial Teacher-Training Institutions will be held at the Carter Hotel, Cleveland, Ohio, Saturday, February 24, in connection with the annual meeting of the N. E. A. Department of Superintendence. The program follows:

9 a.m.

### "Changing Objectives in Business Education."

Report of the N. E. A. Committee on Social-Economic Goals of America, by Dr. Fred J. Kelly, Chief, Division of Higher Education, United States Department of the Interior, Office of Education, Washington, D. C., Chairman of the N. E. A. Committee.

What changes are necessary in business teacher training to meet these objectives? What about the teachers now in service?

Committee: *Chairman*: F. G. Nichols, Harvard University; Alice Wakefield, Fredericksburg (Virginia) State Teachers College; Dr. Benjamin R. Haynes, University of Southern California.

10 a.m.

### "How May Business Teacher-Training Institutions Focus the Attention of the Public on the Best Type of Business Education Needed to Meet Current Economic and Social Conditions?"

From the standpoint of the high schools in our larger cities.

Committee: *Chairman*: D. D. Lessenberry, University of Pittsburgh; Dr. G. F. Cadisch, State College of Washington; John G. Kirk, Philadelphia.

From the standpoint of the high schools in our smaller cities or towns.

Committee: *Chairman*: J. D. Delph, Springfield (Missouri) State Teachers College; E. G. Knepper, Bowling Green (Ohio) State Teachers College; Ernest A. Zelliot, University of Denver.

From the standpoint of the high schools in our rural communities.

Committee: *Chairman*: C. C. Crawford, Valley City (North Dakota) State Teachers College; B. M. Swinford, Ball State (Muncie, Indiana) Teachers College; E. D. Pennell, Western (Kalamazoo) State Teachers College.

12:15 p.m.

Luncheon.  
Program to be announced.

1:30 p.m.

### "Research in Business Teachers Training."

#### Plans of the Research Commission.

*Chairman*: Dr. Paul S. Lomax, New York University.

#### Significant current researches.

Dr. E. G. Blackstone, University of Iowa.

#### Further formulation of research program.

Dr. W. R. Odell, Teachers College, Columbia University.

2:30 p.m.

#### Round Table.

A discussion of vital problems faced by business teacher-training institutions including: (1) business experience for the business teacher, (2) what courses should be offered to train teachers for courses for the consumer? (3) A student-teaching program that is effective, and (4) any other topic the committee cares to include.

Committee: *Chairman*: R. G. Walters, Grove City (Pennsylvania) College; C. M. Yoder, White-water (Wisconsin) State Teachers College; Earl W. Atkinson, Arizona State Teachers College (Flagstaff).

4 p.m.

#### Business Session.

## 1934 International Commercial Schools Contest

THE second International Commercial Schools Contest will be held on the grounds of A Century of Progress Exposition in Chicago, June 27 and 28.

Students from all public, private, and parochial high schools, business colleges, and universities in the world are invited to participate.

Additional information and a complete program may be secured by writing to W. C. Maxwell, Hinsdale High School, Hinsdale, Illinois, chairman of the Contest Committee.

## Indiana Conference

THE Fourteenth Annual Conference of Commercial Teachers of Indiana will be held at Ball State Teachers College, Saturday, February 17, 1934.

The central theme around which the Conference will be built is "National Recovery in Business Education." Dr. E. G. Blackstone, of Iowa State University, will be the leading speaker on the general phase of this theme. Miss Sarah Hupp, of Anderson Senior High School, will discuss the theme as applied to general business training.

Other speakers and their topics are: George E. Ham, Michigantown High School, typing; Miss Alberta Kappeler, Technical High School, Indianapolis, shorthand; A. L. Prickett, Indiana University, Bloomington, bookkeeping. Chester Elson, of Danville High School, is collecting materials to demonstrate current practices in presenting business education for consumer knowledge.

The program is in charge of Blanche M. Wean, head of commercial department, Central Normal College, Danville, Indiana.

<sup>1</sup> The chairman of each committee will make a report and lead in the discussion that follows.

## The New England High School Commercial Teachers Association

By E. E. GAYLORD

**I**N the late nineties and the early years of this century, commercial teaching, as the forerunner of vocational education, extended its helpful activities from the private commercial school to the public high school, and thence to the college and the university.

Associations of commercial teachers were quickly formed, but their membership was mixed, representing all schools giving commercial instruction, although the problems of some of these schools were different from the problems of others. Of the associations thus formed from thirty to thirty-five years ago, the National Commercial Teachers Federation, the Eastern Commercial Teachers Association, and the New England High School Commercial Teachers Association have grown in membership and professional influence.

The New England High School Commercial Teachers Association had its inception at a department conference during the annual meeting of the Essex County (Massachusetts) Teachers Association, in the fall of 1902, the



*Photo by Jordan Marsh Co.*

**E. E. GAYLORD**

Director, Commercial Department, Beverly,  
Massachusetts, High School

writer promoting the plan of an organization for high school commercial teachers alone. An organization meeting was held in the Engineering Building of the Massachusetts Institute of Technology, Boston, in March, 1903. By a coincidence, the thirty-first and most recent anniversary of the first regular meeting was held last November in the splendid new M. I. T. buildings in Cambridge, Massachusetts.

H. G. Greene was the first president. A meeting to receive and act on organization committee reports was held in July, 1903, during the N. E. A. convention in Boston. The first regular annual meeting was held in Providence in October, 1903, and meetings have been held in October or November every year since. The membership has grown from a few score to several hundred.

During the first two years of the Association's record, Miss Helen Follansbee was the careful efficient secretary. For the next four years, H. E. Congdon's systematic and beautifully written reports adorn the secretary's book. Then, in 1908, W. O. Holden, the present faithful secretary, was chosen. For several years the Association finances have been handled in a highly satisfactory manner by Joseph Cantalupi.

It has been the policy of the officials to hold meetings chiefly in the eastern part of



**JOSEPH CANTALUPI**

Head, Commercial Department, Everett,  
Massachusetts, High School



W. O. HOLDEN

Head, Commercial Department, Pawtucket,  
Rhode Island, High School

New England. Boston has played the host more often than any other city, and the conventions have been held one or more times in the following cities, which are only from 5 to 20 miles out of Boston: Brookline, Malden, Newtonville, Everett, Cambridge, Salem, Lowell. The more distant cities that have entertained the Association are: New Bedford, Providence, Worcester, Springfield, Hartford, and New Haven.

The following well-known New England commercial teachers have served as presidents of the Association:

H. G. Greene  
F. E. Lakey  
J. D. Houston  
E. S. Colton  
Carlos B. Ellis  
E. E. Kent  
G. Walter Williams  
Arthur J. Meredith  
E. A. Sammis  
A. H. Sproul  
Hastings Hawkes  
C. F. Rittenhouse  
K. C. Atticks  
R. G. Laird  
F. A. Ashley

G. L. Hoffacker  
Arthur F. O'Malley  
Atlee L. Percy  
Chester M. Grover  
C. A. Cederberg  
Katherine W. Ross  
Rufus Stickney  
Walter E. Leidner  
O. E. Beach  
E. W. Engler  
Guy D. Miller  
Mrs. Marion F. Woodruff  
Roderic K. Stanley  
H. E. Cowan (1934)

The programs have been devoted largely to a consideration of the best subject matter for commercial courses, the relation of these courses to others, methods of presentation, vocational guidance, placement of graduates, relation between the high school commercial

departments and the business community, and similar practical topics.

Speakers have been chosen from the more enterprising and effective commercial teachers, from leaders in business life, and from those who are conspicuous in related work among higher institutions.

Among the first rank of distinguished university men who have addressed the Association are Dr. W. H. P. Faunce, of Brown; Dr. Arthur T. Hadley, of Yale; Dr. David Snedden, of Columbia; Dr. Charles W. Eliot, of Harvard; Dr. Frank P. Speare, of Northeastern; Dr. Payson Smith, present State Commissioner of Education for Massachusetts.

Among the charter members still active in commercial teaching are the following:

W. W. Petrie	Elizabeth Campbell
W. L. Anderson	J. C. Moody
Laura E. Horne	Helen Follansbee
E. W. Engler	C. E. Doner
E. L. Blaisdell	Lena B. Pool
G. M. Hawes	W. O. Holden
F. E. Lakey	E. E. Gaylord

The N. E. H. S. C. T. A., like other similar organizations, is justified by its efforts in broadening the professional outlook, breaking up the natural tendency toward insularity, enlarging acquaintance, stimulating educational ambition, and adding dignity and a warm and quickening human interest to the high calling of the teacher.



HAROLD E. COWAN  
Head, Commercial Department, Dedham,  
Massachusetts, High School

## B. E. W. Semi-annual Index of Commercial Education Addresses

July 1-December 31, 1933

(Concluded)

[Key to Parenthetical References: (1) N. E. A. Department of Business Education meeting, July 1; (2) National Commercial Teachers Federation meeting, December 27-29; (3) University of Chicago Conference, June 29-30; (4) Commercial Education Association of New York City and Vicinity meeting, November 4. The addresses given at these meetings have been keyed to designate that they may be obtained in printed form in the published proceedings of the association before which they were given.]

### GUIDANCE AND PLACEMENT (Continued)

- "Educational Guidance and Administrative Problems in Commercial Education," Frank M. Leavitt, Associate Superintendent, Public Schools, Pittsburgh, Pa.
- "Practical Plan for Bringing in Calls for Graduates, A," W. S. Sanford, Sanford-Brown Business College, St. Louis, Mo. (2)
- "Problems Facing Junior Workers and What We Can Do To Help Them," Myra Green, Registrar, Continuation High School, San Francisco.
- "Summary of Principles of Guidance in Commercial Education," Gordon F. Cadisch, Director, School of Business Administration, State College of Washington, Pullman. (2)
- "Teacher Aids and Responsibility for Guidance in Book-keeping and Related Subjects," Paul A. Carlson, Director, Commercial Education, State Teachers College, Whitewater, Wisc. (2)
- "Teacher Aids and Responsibility for Guidance in Secretarial Subjects," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City. (2)
- "Treatment of Problem Cases in the Commercial Department, The," F. W. Parr, Professor of Secondary Education, Oregon State College, Corvallis, Oreg.
- "Vocational Guidance in Social-Business Subjects," Lloyd L. Jones, Berea, Ohio. (2)
- "What Affiliations Can We Make with Business and Industry to Promote the Placement of Our Graduates?" George McClellan, Littleford-Nelson School of Commerce, Cincinnati, Ohio.

### JUNIOR BUSINESS EDUCATION

- "Commercial Work in the Junior High Schools," Mamie Gingles, West Junior High School, Little Rock, Ark.
- "Consumer-Business Education—A Necessity," Patty Spruill, Woman's College, University of North Carolina, Greensboro.
- "Elementary Business Training As a Required Course," Robert P. Linn, Beaver Falls Junior High School, Beaver Falls, Pa.
- "Junior Business Training," Fern Autrey, Public Schools, Austin, Texas.
- "Junior Business Training," Lloyd L. Jones, Berea, Ohio.
- "Means by Which Skills May Be Developed in the Teaching of Elementary Business Practice," Alfred L. Hoffman, New Utrecht High School, Brooklyn, N. Y. (4)
- "Methods of Teaching Introduction to Business," James Morgan, Vice Principal, Monroe High School, Rochester, N. Y.
- "Preparing the Pupils for the Major Units That Are Outlined in the New York State Syllabus, Introduction to Business," Herbert A. Tonne, Assistant Professor of Education, School of Education, New York University.

- "Social-Business Education—A Necessity," Lula Dobson, R. J. Reynolds High School, Winston-Salem, N. C.
- "Teacher Aids and Responsibility for Guidance in Social-Business Subjects," A. E. Bullock, In Charge of Commercial Education, Los Angeles, Calif. (2)
- "Teaching Business Ethics," Merle Sidener, Indianapolis, Ind.
- "Voice of Business in American Education, The," Lloyd L. Jones, Berea, Ohio.

### OBJECTIVES

- "Function of Secondary Commercial Education, The," D. D. Lessenberry, Head, Department of Commercial Education, University of Pittsburgh.
- "General Objectives of Commercial Education in Secondary Schools," Louis A. Rice, Assistant in Secondary Education, State of New Jersey, Trenton.
- "Methods of Determining Objectives of Business Education," Earl W. Barnhart, College of the City of New York. (1)
- "Objectives of Business Education As Viewed by Classroom Teachers of Commercial Subjects," J. O. Malott, Federal Emergency Administration, Federal Building, Chicago, Ill. (2)
- "Social Aims of Commercial Education, The," R. G. Walters, Director of Teacher Training and Personnel Officer, Grove City College, Grove City, Pa.
- "Social and Commercial Values of Commercial Education," L. E. Terry, South-Western Publishing Company, Cincinnati, Ohio.

### OFFICE PRACTICE

(See also "Secretarial Practice")

- "Actual Business Practice," Roderic K. Stanley, Head, Commercial Department, Weaver High School, Hartford, Conn.
- "Character Training and Character Development in the Office Training Laboratory," Rufus Stickney, Boston Clerical School, Boston, Mass.
- "Determining the Importance of Office Appliances in Education for Business," Winifred G. West, Broad Ripple High School, Indianapolis, Ind. (2)
- "Modern Methods in Teaching Filing," N. Mae Sawyer, Director, American Institute of Filing, Buffalo, N. Y. (2)
- "Modern Way of Teaching Business Machines, The," Albert Stern, Burroughs Adding Machine Company, New York City. (2)
- "Office Practice," R. G. Cole, High School, Abilene, Texas.
- "Specific Business Skill, Taught and Applied," Albert Stern, Burroughs Adding Machine Company, New York City. (4)
- "What Skills Should Be Developed in Accounting, Business Practice, and Arithmetic?" Mrs. Mary B. Ascher, James Monroe High School, New York City. (4)

## PENMANSHIP

"Handwriting and Its Relation to Education," Linda S. Weber, President, N. A. P. T. A., Gary, Ind. (2)  
 "Progressive Penmanship Instruction," John G. Kirk, Director of Commercial Education, Philadelphia, Pa. (2)

## THE PRIVATE BUSINESS SCHOOL

"Are We Lost?" J. L. Harman, President, Bowling Green Business University, Bowling Green, Ky.  
 "Financial Problems of the Private School," T. B. Cain, President, West Virginia Business College, Clarksburg. (2)  
 "My Philosophy, My Plan, My Practice," D. D. Miller, Miller School of Business, Cincinnati, Ohio.  
 "New Deal and Its Probable Effect upon the Private Business School, The," B. F. Westmore, Northwestern Business College, Spokane, Wash.  
 "New Readjustments That Face the Private Schools, The," Paul S. Lomax, Professor of Education, School of Education, New York University. (4)  
 "Publicity Policy of the Successful Business School of the Future, The," J. H. Seeley, Scranton-Lackawanna College, Scranton, Pa.  
 "Putting the Private Business School into the Foreground in the Field of Education," S. I. Gresham, Brown's Business College, Springfield, Ill.  
 "Tested Means of Developing Good Will," E. O. Fenlon, President, American Institute of Business, Des Moines, Iowa. (2)  
 "Trend of Public Thought Toward the Private School in Canada, The," Hon. Jasper Beatty, Victoria, B. C., Canada.  
 "Typical Radio Advertising Program, A," W. A. Robbins, Lincoln, Nebr.  
 "Typical School Assembly, A," W. R. Hamilton, Principal, Hamilton University, Mason City, Iowa.  
 "What's Ahead for the Private Business School That Survives?" W. S. Sanford, Sanford-Brown Business College, St. Louis, Mo.

## RECONSTRUCTION OF BUSINESS EDUCATION

"Business Education from a Superintendent's Point of View," W. J. Bogan, Superintendent of Schools, Chicago, Ill. (3)  
 "Business Education in a Changing Economic and Social Order," Leverett S. Lyon, Executive Vice President, The Brookings Institution, Washington, D. C.  
 "Business Education in the Economic Upheaval," William Halnon, Department of Education and Psychology, Western State Teachers College, Kalamazoo, Mich.  
 "Business Education's Contribution to a Democracy," B. Frank Kyker, Director of Commercial Teacher Training, Woman's College, University of North Carolina, Greensboro.  
 "Changing Business Education from a Frill to a Necessity," B. Frank Kyker, Director of Commercial Teacher Training, Woman's College, University of North Carolina, Greensboro.  
 "Coming Century of Progress for Business Education, The," Robert R. Aurner, School of Business Administration, University of Wisconsin, Madison.  
 "Commercial Education and the NRA," J. H. Shields, Duke University, Durham, N. C.  
 "Commercial Education to Meet Modern Needs, A," William L. Moore, Principal, John Hay High School, Cleveland, Ohio. (2)  
 "Commercial Education under Present Conditions," A. J. Becker, Supervisor of Commerce, Salt Lake City, Utah.  
 "Commercial Teaching in the New Era," E. Karl McGinnis, School of Business Administration, University of Texas, Austin.

"Comparison of the Obligations and Position of Business Education in Our Economic Order and the Objectives of Business Education As Viewed by Classroom Teachers, A," W. R. Odell, In Charge of Commercial Teacher Training, Teachers College, Columbia University.  
 "Does Business Need a 'New Deal?'" John Lovelace, Bozeman, Mont.  
 "Echoes from the N. E. A. and the University of Chicago Conference on Business Education," William Spencer, Dean, School of Business, University of Chicago.  
 "Evaluation of the University of Chicago Conference Contributions," Thomas E. Benner, Dean, College of Education, University of Illinois, Urbana. (3)  
 "Evaluation of the University of Chicago Conference Contributions," F. G. Nichols, Associate Professor of Commercial Education, Harvard University. (3)  
 "Future for Business Education in the State," E. W. Atkinson, Arizona State Teachers College, Flagstaff.  
 "Future of Commercial Departments in Arkansas, The," O. L. Wilkins, High School, Malvern, Ark.  
 "How Shall We Educate for the New Deal?" John F. Johnston, Industrial Engineer, San Francisco.  
 "Looking Ahead in Business Education," Seth B. Carkin, President, Packard School, New York City.  
 "Looking to the Future," Elmer G. Miller, Director of Commercial Education and Handwriting, Pittsburgh, Pa. (2)  
 "National Economic Program and You, The," J. O. Malott, Federal Emergency Administration, Federal Building, Chicago, Ill. (2)  
 "Necessary Changes in School Finance," R. R. Renne, Montana State College, Bozeman.  
 "Necessary Reorganization for Commercial Education," E. G. Blackstone, Head, Commercial Teacher Training Division, University of Iowa.  
 "New Applications of Old Principles in Business," Sam Clabaugh, President, Protective Life Insurance Company, Birmingham, Ala.  
 "New Deal in Business Education, A," B. Frank Kyker, Director of Commercial Teacher Training, Woman's College, University of North Carolina, Greensboro. (2)  
 "New Deal in Business Education, A," J. F. Sherwood, Professor of Accounting, University of Cincinnati, Ohio.  
 "New Ideas in the Commercial Field," W. L. Gross, The Gregg Publishing Company, San Francisco, Calif.  
 "New Standards in Business Education," J. Evan Armstrong, President, Armstrong College, Berkeley, Calif.  
 "N. R. A. and Its Relation to Business Education, The," Grover A. Whalen, Chairman, N. R. A., New York City. (4)  
 "N. R. A. Program, The," R. S. Van de Woestyne, Knox College, Galesburg, Ill.  
 "Outlook in Commercial Education, The," Paul A. Carlson, Director of Commercial Education, State Teachers College, Whitewater, Wisc.  
 "Part of Business Education in the New Deal, The," Elvin S. Eyster, Head, Commercial Department, North Side High School, Fort Wayne, Ind.  
 "Present Economic Trends," Reid L. McClung, Dean, College of Commerce, University of Southern California, Los Angeles.  
 "Present-Day Trends in Commercial Education," Charles F. Walker, President, Northwestern School of Commerce, Portland, Ore.  
 "Recent Developments in Content," Clinton A. Reed, State Supervisor of Commercial Education, Albany, N. Y. (3)  
 "Recent Developments in the Teaching of Commercial Subjects," C. C. Calhoun, State Teachers College, Conway, Ark.  
 "Recent Trends in Business Education," Louis A. Rice, Assistant in Secondary Education, State of New Jersey, Trenton.

"Recent Trends in Business Practice," Clement S. Lagsdon, Assistant Professor of Marketing, Michigan State College, Lansing.

"Recent Trends in Commercial Education," A. O. Colvin, Professor of Commercial Education, Colorado State Teachers College, Greeley.

"Relation of the New Deal to Business Education, The," Elmore Peterson, Dean, School of Business, University of Colorado, Boulder.

"Report of the Committee on the Obligations and Position of Business Education in Our Economic Order," F. G. Nichols, Associate Professor of Commercial Education, Harvard University.

"Revision of the Commercial Curriculum," John G. Kirk, Director of Commercial Education, Philadelphia.

"Significance of Certain Aspects of Commercial Education," H. P. Smith, Head, Department of Education, Syracuse University, Syracuse, N. Y.

"Some Doubts about Educational Opportunity," Thomas E. Benner, Dean, College of Education, University of Illinois, Urbana.

"Some Observations in Commercial Education," L. C. Rusmisel, The Gregg Publishing Company, Chicago, Ill.

"Some Teachings of Prosperity and Depression," C. A. Phillips, Dean, College of Commerce, Iowa State University, Iowa City.

"Sunny Side of the Depression, The," J. E. Le Rosignol, Dean, University of Nebraska, Lincoln.

"Teaching the Economic Problems Arising in Our New Social Order," Albert E. Bullock, In Charge of Commercial Education, Los Angeles, Calif. (2)

"Trends in Business Education," Jessie F. Connell, Montana State College, Bozeman.

"Yesterday, Today, and Tomorrow," Willard J. Wheeler, President, Wheeler Business College, Birmingham, Ala.

#### RESEARCH

"Report of the Research Commission of the N. A. C. T. T. I., The," Paul S. Lomax, Professor of Education, School of Education, New York University.

"Usefulness of Research in Commercial Education," E. G. Blackstone, Head, Commercial Teacher Training Division, State University of Iowa, Iowa City.

#### SALESMANSHIP

"Are Your Sales Classes Interesting?" Louis W. Korona, Allderdice High School, Pittsburgh, Pa.

"Commercial Course Graduate As a Retail Salesman, The," G. W. Degon, Montgomery Ward & Company, Yakima, Wash.

"Man in Salesmanship, The," Frank M. See, General Agent, New England Mutual Life Insurance Company, St. Louis, Mo.

"Merchandising in 1934," Elliott Hensel, Advertising Counselor, *Illustrated Daily News*, Los Angeles, Calif.

"Research in Salesmanship," Hayden Colby, Northeast Missouri State Teachers College, Kirksville, Mo.

"Training for Selling," Mrs. Flora T. Young, Personnel Director, The Fair Store, Chicago, Ill.

"What Skills Should Be Developed in Advertising and Selling?" Helen Norton, National Retail Dry Goods Association, New York City. (4)

#### SECRETARIAL PRACTICE

(See also "Office Practice")

"Modern Trends in the Teaching of Typewriting and Secretarial Training," Ivy Monk, Head, Typing and Office Practice Departments, Drexel Institute, Philadelphia.

"Secretaries in the Making," E. W. Hauck, Member, Board of Education, Los Angeles, Calif.

"Secretary Looks Ahead, The," Grace Stoermer, Vice President, Bank of America, Los Angeles, Calif.

"Some Elusive Phases of Secretarial Training," Rufus Stickney, Boston Clerical School, Roxbury, Mass.

"Teacher Aids and Responsibility for Guidance in Secretarial Subjects," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City. (2)

"Teaching Methods by Which Skill May Be Developed in Secretarial Studies," Edgar C. Wikdall, Packard School, New York City.

"What Skills Shall Be Developed in Secretarial Subjects?" Beatrice Leff, James Monroe High School, New York City.

"What Skills Shall Be Developed in Secretarial Subjects?" Margaret Scott Miller, Personnel Director, Remington Typewriter Company, New York City.

#### SHORTHAND

"Adapting the Shorthand Course to Meet Present Economic Conditions," Clyde I. Blanchard, Director of Research, The Gregg Publishing Company, New York, City.

"Banking the Fire," Clyde I. Blanchard, Director of Research, The Gregg Publishing Company, New York City.

"Beyond the Technicalities," James J. Jones, The Gregg Publishing Company, Chicago, Ill.

"Changes I Foresee in the Shorthand and Typewriting Classes of the Future," R. G. Cole, High School, Abilene, Texas.

"Development of Skill in Transcription, The," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City.

"Direct Method of Teaching Shorthand, The," Ann Brewington, Assistant Professor of Secretarial Training, School of Business, University of Chicago.

"Future Personal Characteristics, Performance, Standards, and Placement Opportunities for Shorthand and Typewriting in the Business Office, The," I. J. Berni, Office Manager, Procter & Gamble Company, Cincinnati, Ohio. (2)

"How I Teach Beginning Shorthand," Mrs. Minnie De Motte Frick, Assistant Professor of Secretarial Science, Oregon State College, Corvallis, Oreg.

"Making the Advanced Shorthand Course Practical," John Comiskey, High School, Hot Springs, Ark.

"Modern Methods of Teaching Shorthand," Clyde I. Blanchard, Director of Research, The Gregg Publishing Company, New York City.

"New Deal in the Teaching of Shorthand and Typewriting, A," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City.

"New Deal in Training Stenographers, The," Goldena M. Fisher, Gregg College, Chicago, Ill.

"Pedagogic Delusions in the Teaching of Shorthand," Clyde I. Blanchard, Director of Research, The Gregg Publishing Company, New York City.

"Résumé of Shorthand and Typing Requirements in Secondary Schools of South Dakota," Dorothy Travis, High School, Pierre, S. Dak.

"Standards or Accomplishments in Transcription," W. C. Kammerer, Head, Commercial Department, Central High School, Detroit, Mich.

"Stenography," Louise Armstrong, Public Schools, Austin, Texas.

"What Skills Should Be Developed in Stenography and Typewriting?" Louis Goldstein, Certified Shorthand Reporter, New York City. (4)

"What Skills Should Be Developed in Stenography and Typewriting?" William R. Odell, In Charge of Commercial Teacher Training, Teachers College, Columbia University, New York. (4)

#### SUPERVISION

"Message from the State Education Department, A," Clinton A. Reed, State Supervisor of Commercial Education, Albany, N. Y.

"State's Supervision of Commercial Education, The," W. E. James, First Assistant Superintendent of Public Instruction, Austin, Texas.

#### TEACHER TRAINING

(See also "Reconstruction of Business Education")

"Development of Skill from the Standpoint of an Examiner, The," Henry Levy, Board of Examiners, Board of Education, New York City. (4)

"Equipment of Teachers of Commerce, The," R. W. Fairchild, President, Illinois State Normal University, Normal, Ill.

"Good and Bad Teaching Techniques," Andrew Elwick, Queen Anne High School, Seattle, Wash.

"How to Improve the Teaching of Business Subjects," Paul S. Lomax, Professor of Education, School of Education, New York University.

"Human Element in Commercial Teaching, The," Louis A. Leslie, Assistant Comptroller, The Gregg Publishing Company, New York City.

"Increasing the Effectiveness of Teachers," Edward J. McNamara, Principal, High School of Commerce, New York City.

"In-Service Improvement of the Business Teacher, The," Clay Slinker, Director, Department of Business Education, Public Schools, Des Moines, Iowa. (3)

"Part the Teacher Plays in Building up the School, The," Paul Moser, Moser School, Chicago, Ill.

"Place of the State Teachers College in Commercial Education, The," W. A. Brandenburg, President, State Teachers College, Pittsburg, Kans.

"Subject-Matter Preparation of the Business Teacher, The," John G. Kirk, Director of Commercial Education, Philadelphia. (3)

#### TESTS AND CONTESTS

"Contests," Roy Bedichek, Chief, Interscholastic League, Austin, Texas.

"Improvement of Instruction by Means of Diagnostic Testing," Ethel A. Rollinson, Instructor in Shorthand and Typing, Columbia University.

"Preparing Students for the State Contest," E. F. Edlefsen, Superintendent, High School, New Plymouth, Idaho.

"Results of the Contests at the Century of Progress and What They Indicate About the Future, The," William C. Maxwell, Head, Commercial Department, High School, Hinsdale, Ill. (2)

"Testing and Grading of Typewritten Work, The," Vernal H. Carmichael, Ball State Teachers College, Muncie, Ind.

"Use of Intelligence Tests in Predicting Success, The," F. Y. Fox, President, L. D. S. Business College, Salt Lake City, Utah.

#### TYPEWRITING

"Changes I Foresee in the Shorthand and Typewriting Classes of the Future," R. G. Cole, High School, Abilene, Texas. (2)

"Common Sense in Typewriting," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City. (2)

"Efficiency of Practice Teaching in Typewriting, The," Frances Henderson, Senior High School, Kirksville, Mo.

"Future Outlook in Typewriting, The," Gertrude C. Ford, Business Education Department, Ohio State University, Columbus, Ohio. (2)

"Future Personal Characteristics, Performance, Standards, and Placement Opportunities for Shorthand and Typewriting in the Business Office, The," I. J. Berni, Office Manager, Procter & Gamble Company, Cincinnati, Ohio. (2)

"How I Teach Typing for Accuracy, Speed, and Form,"

Mrs. Miriam Simons, Critic Teacher, High School, Corvallis, Oreg.

"How the Teaching of Typewriting May Be Vitalized," Geneva F. Hoult, High School, Chrisman, Ill.

"Investigation of the Uses of Typewriting by Students of Typewriting, An," Janett Buck, High School, Kahoka, Mo.

"Means by Which Skill May Be Developed in Typewriting," Mrs. Esta Ross Stuart, High School, Berkeley, Calif. (4)

"Modern Trends in the Teaching of Typewriting and Secretarial Training," Ivy Monk, Head, Typing and Office Practice Departments, Drexel Institute, Philadelphia.

"Motivation in Typewriting," Lyda Gore Rice, Head, Commercial Department, Central High School, Chattanooga, Tenn.

"My Typewriting Methods," Mrs. M. Theobald, White Sulphur Springs, Mont.

"Need of Better Methods for Beginning Typewriting, The," L. O. Cummins, Manager, Boston Office, The Gregg Publishing Company.

"New Deal in the Teaching of Shorthand and Typewriting, A," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City.

"New Deal in Typewriting, A," Frances R. Botsford, Ball State Teachers College, Muncie, Ind.

"New Techniques in the Teaching of Typing" (with motion pictures), Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City.

"Practical Pointers Regarding the Teaching of Tabulating," Harold H. Smith, Assistant Editor, The Gregg Publishing Company, New York City.

"Résumé of Shorthand and Typing Requirements in Secondary Schools of South Dakota," Dorothy Travis, High School, Pierre, S. Dak.

"Teaching for Typing Power," D. D. Lessenberry, Head, Department of Commercial Education, University of Pittsburgh.

"Testing and Grading of Typewritten Work, The," Vernal H. Carmichael, Ball State Teachers College, Muncie, Ind.

"Typewriting," Roy L. McPherson, Business Administration, College of Industrial Arts, Denton, Texas.

"Typewriting in the Business School," Mrs. Mary M. Woodside, Duffs-Iron City College, Pittsburgh, Pa.

"Typewriting in the Primary Grades and Demonstration," Octavine Cooper, High School, Colorado, Texas.

"Typewriting in the Primary Grades and Demonstration," Ben D. Wood, Director, Bureau of Collegiate Educational Research, Columbia University.

"Typewriting Methods," D. D. Lessenberry, Head, Department of Commercial Education, University of Pittsburgh.

"Visual Aid in Teaching Beginners How to Typewrite," Mrs. Ethel Wood, State College of Washington, Pullman, Wash. (2)

"What Skills Should Be Developed in Stenography and Typewriting?" Louis Goldstein, Certified Shorthand Reporter, New York City. (4)

"What Skills Should Be Developed in Stenography and Typewriting?" William R. Odell, In Charge of Commercial Teacher Training, Teachers College, Columbia University. (4)

#### ADDENDA

"Significance of Accounts, The," Robert D. Ayars, University of Pittsburgh.

"Business English—What, Why, and How?" J. Walter Ross, South Hills High School, Pittsburgh, Pa.

"What Is Going on in the World of Business Law," James C. Reed, University of Pittsburgh.

"Improving the Teaching of Business Mathematics in the High School," Clinton M. File, State Teachers College, Indiana, Pa.

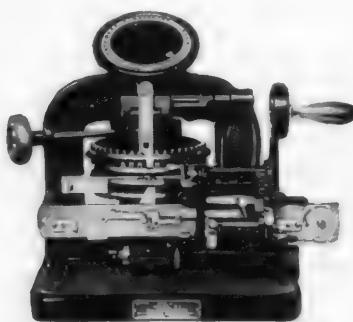
"Economics," G. J. Bridges, Grove City College, Grove City, Pa.

## Office Supplies and Equipment News

Brought to you by ARCHIBALD ALAN BOWLE

*News gathered from the office supplies and equipment marts of the world, to keep you in touch with new office appliances, systems, and procedures. Descriptive brochures and circulars will be sent you on request. Use the coupon.*

**10.** Another machine belonging in the minimum-equipment list mentioned in the October *B. E. W.* is the Graphotype 6144, which combines low cost and simplicity with the functions necessary to teach the all-important subject



GRAPHOTYPE 6144

of name listing. The machine is, in reality, a typewriter that types in metal and, while it cuts only in capital letters and is not motor driven, these are really advantages to the office training teacher. One student can easily teach another the actual operations. Projects for name listing are in preparation. More about this later. To schools, the price of the machine is \$130.

**11.** The advantages of Addressograph Class 200 are analogous to those of the Graphotype, of which it is the complement. It is hand powered, extremely simple, and yet holds thirty frames and plates, an adequate supply for any normal teaching project. The teaching material referred to in the preceding paragraph will also apply to this machine, which sells to schools for \$62.50.

**12.** The Spool-O-Wire stapling machine, made by Remington-Rand, is most economical of operation. The machine holds a spool of wire containing the equivalent of 1,500 1-inch staples, and is capable of binding together an average of 40 ordinary sheets of paper at one time. It is just the thing for the student's home work. The machine sells for \$20, with a discount of 20 per cent to schools. Refills are \$2.50 net.

**13.** I have been asked to recommend a good chair for the typewriting room. Well, there are many suitable chairs on the market, and it is difficult to determine just which is the best. The kind that gives support to the small of the back rates high with me. There is the "Cushioner," made by Remington-Rand; "Good-form," by the General Fireproofing Company; "Postur-Chair," by the Toledo Metal Furniture Company; the "Stenographic Chair," by the Sturgis Posture Chair Company, Sturgis, Michigan; and "Pos-Chair," by the Johnson Chair Company, Chicago. Take your pick!

**14.** The ideal typewriting demonstration table is the product of the Adjustable Table Company, Grand Rapids, Michigan. The table has three levels: the center, upon which to stand



A TYPEWRITING DEMONSTRATION TABLE

the machine; a raised platform, on which to put copy; and an extension on the other side, upon which to place your finished work. It is known as model No. 2EXT, "Satellite."

— — — — —  
**A. A. Bowle, 270 Madison Avenue, New York,  
N. Y.** (Feb., 1934)

Please send me, without obligation, further information about the products circled below.

10      11      12      13      14

Name .....

Address .....

# Automatic Review Lessons in Gregg Shorthand

By CLYDE INSLEY BLANCHARD

Director of Research, the Gregg Publishing Company

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In "Banking the Fire" (see November, 1933, issue, page 139), the attention of theory teachers was called to the great waste of learning time that ensues from the mechanical, purposeless repetition of outlines, thus violating an important principle of skill building.

The large amount of review that is present in each new theory lesson functions constantly in stepping up the student's mastery of preceding principles. If the teacher utilizes this "automatic review" in the daily lesson, he may safely drop completely from his teaching outline all formal theory reviews. If he is a high school teacher following a time schedule that specifies the completion of Chapters I-VI of the Manual the first semester and Chapters VII-XII the second semester, he may safely speed up this schedule. Let him try to complete Chapters I-IX the first semester and organize the second-semester students into an elementary dictation class in which the theory principles of Chapters X-XII will be learned, one or two a day, through the medium of

the dictation material in "Gregg Speed Studies."

To enable the theory teacher to concentrate on the theory review present in each lesson, the vocabulary of the Gregg Shorthand Manual and of the "5,000 Most-Used Shorthand Forms" has been rearranged and is being published in monthly installments. The automatic review in Chapter I was given in the January issue.

It is suggested that, in presenting the words of the new lesson the first time, the teacher follow the arrangement in the Manual and in the "5,000 Most-Used Shorthand Forms," so that the student will concentrate upon the new theory to be learned and be unconscious of the review principles involved. The Manual arrangement is also an aid to the rapid development of a fluent writing style.

After this initial presentation of the new theory has been completed, the teacher should continue his blackboard presentation and his dictation according to the arrangement given in the corresponding automatic review lesson.

The automatic review matter for Chapter II follows.

## Automatic Review in Chapter II

[The numbers enclosed in parentheses refer to those paragraphs in the Gregg Shorthand Manual that are reviewed.]

Par. 34. (11) appeal, happen, happening, happier, happy, heap, help, helping, pay, paying, bay, bee, habit, affair, factory, fee, half, if, avail, even, evening, evil, heaven, heavier, heavy, navy, valley, vary, victory, jelly, machinery.

(12) penny, pity, attach, attached, attaching, each, age, edge, tragedy, she.

(14) camp, campaign, cap, cape, clipping, crêpe, damp, deep, grip, lamp, lap, lip, map, nap, pack, packing, pain, pan, pick, picked, picking, picnic, pin, rapid, rip, tip, trip, baby, back, bag, bake, bat, beach, bean, beat, beating, bet, bit, cabin, ribbon, affair, fame, fare, fail, failing, fair, factory, farewell, fat, fatal, fate, fear, fed, federal, feed, feel, feeling, feet, fell, felt, fever, fill, filling, finish, finishing, fish, fishing, fit, fitting, grief, laugh, laughing, leaf, lift, relief, tariff, welfare, avail, driven, grave, heavier, leave, leaving, level, live, living, lived, navy, relieve, relieved, vague, vain, valley, vary, varied, velvet, victory, chain, channel, chat, cheap, check, checking, chicken, chief, match, peach, ranch, reach, reaching, rich, teach, teaching, wretched, gem, jade, magic, page, range, religion, tragedy, garage, machine, machinery, shade, shake, shame, shape, shed, sheep, sheet.

(15) appeal, happier, pair, parade, park, parlor, bare, bargain, bear, bearing, bell, belt, buried, calf, gift,

varied, catch, kitchen, jail, jelly, cash, cashed, sharp, shell.

(18) behalf, garage.

Par. 37. (11) pray, apple, play, playing, plea. (12) pretty. (14) cheaper, paper, chapel, plane, prayer, preach, maple, plain, plan, planning, pledge, pledged, prim, wrapper, pepper. (15) plate, played, plead, pretty.

Par. 38. (11) able. (14) brain, branch, brave, bridge, brief, chamber, labor, laboring, neighbor, blame, label, brim, breach, blare. (15) bread, braid, braided, bled, blade. (18) break, breaking, brick, black. (27) member.

Par. 39. (11) free, fray, flee. (14) frame, French, fresh, freshman, freshmen, flesh, frail, flame, flap, flash. (15) fret, fleet, flat. (17) freshman. (18) flag. (27) freshmen.

Par. 40. The words in this paragraph will be found in the review list for Pars. 34-39.

Par. 41. (11) about, after, ever, every, very. (14) maybe, one-half, people. (15) platform. (37) platform.

Par. 49-50. (11) heaps, helps, busy, easier, acres, affairs, crazy, ears, errors, mercy, asleep, salary, silly, sleepy, appeals, apples, hills, lazy, habits, fancy, happens, happiness, heavens, illness, vacancy, as, ease, easy, essay, has, say, saying, sea, see, seeing, escape, escaped,

eggs, hasten, sanitary, scenery, astray, east, happiest, haste, history.

(12) eats, hats, hence, immense, enemies, city, prettiest, ages, heads, stay, study, staying, studying, safety, steady.

(14) lamps, lips, maps, pass, passing, pays, peace, peas, piece, space, trips, babies, base, busy, affairs, brass, crazy, dress, dressing, factories, fears, grace, fierce, freeze, memories, grass, mercy, neighbors, nurse, slip, class, feels, papers, players, phrase, praise, press, race, details, glass, lace, lazy, lease, less, likes, mills, meals, palace, place, placing, raise, raising, series, plays, release, released, fits, minutes, gets, meets, sheets, tickets, trace, tracing, tracer, days, ladies, needs, pads, shades, today's, brains, cans, trees, asleep, salaries, sleep, sleepy, sleeping, slept, slippers, chance, chickens, dance, dancing, darkness, danced, fancy, fence, finance, glance, goodness, happiness, illness, knees, machines, niece, pains, patience, pins, plans, prince, rains, remains, trains, vacancy, vacancies, claims, dreams, enemies, frames, games, mass, miss, missing, sees, checks, makes, marks, sack, sacred, sake, sashes, sages, scheme, scrap, screen, secret, seek, seeking, seeks, sick, skating, skin, bags, sane, sanitary, scene, scenes, senate, sense, scenery, seen, sickness, sin, since, snap, cement, same, seem, seems, city, seeming, sat, seat, seats, set, sets, setting, settle, sit, sitting, staff, stage, stamp, cities, stamping, stamps, stays, smash, steam, steel, step, steps, stepping, stiff, strain, stream, stretch, studies, sad, said, seed, seeds, face, fees, phase, safe, safety, canvass, leaves, save, saving, saves, slaves, sleeves, branches, peaches, severe, reaches, sips, sables, slim, tease, daze, teaches, pages, pledges, dishes, sash, cease, ceased, season, sea-sons, seized.

(15) spare, split, spread, easier, bears, pairs, series, tracer, ceiling, cellar, sail, sailing, salary, salaries, sale, seal, sell, selling, self, salad, silk, silly, appeals, palace, sales, sells, gifts, plates, rates, tickets, ladies, leads, reads, case, keys, sacred, secret, takes, stick, sketch, sketches, gas, guess, guessing, prettiest, straight, these.

(17) deeds, finance, man's, means, enemies, stayed, studied.

(18) scale, scare, scarf, legs, breaks.

(19) acres, crazy, glass, glance, sacred, scrap, screen, secret.

(20) grace, grass, class, claims.

(21) darkness, marks, silk.

(26) details, debts, today's, steady, study, studied, studies, studying, dates.

(27) members, memories, minutes, immense, men's, remains, cement.

(37) press, prince, prettiest, spread, papers, praise, players, apples, place, placing, plays, plates, plans, pledges, spell, spelling, split, slippers.

(38) brass, members, neighbors, barrels, brains, breaks, branches.

(39) freeze, phrase, frames.

Par. 50. Distributed in Par. 49.

Par. 51. (11) mystery. (14) basket, chest, desk, dresser, fascinating, fast, gasoline, least, lesson, lessons, listen, listening, medicine, mystery, risk, task, taste, vast, visit, visits, visiting, mist, mask, grasp, accede, pressed, raised, ransack, mason. (15) cast, gasoline, guest, guests, dresser, pencil. (20) grasp. (37) pressed.

Par. 52. (12) analysis. (14) analysis, basis, chances, classes, dances, dresses, faces, ceases, traces, finances, passes, pieces, places, glasses, senses, masses, census, leases. (15) cases, thesis. (17) finances. (19) glasses. (20) classes.

Par. 53. (11) again, against, apart, far, favor, favorite, thorough, thoroughly, three. (12) favorite, party. (14) first, matter, matters, parties. (21) work, working, works. (49) against, always, business, matters, must, others, parts, parties, first, some.

Par. 54. (11) everything. (12) anything. (49) something.

Par. 55. (51) businesses, causes, desires.

Par. 57. (14) fix, fixes, maximum, mix, mixes, tax, taxes.

Par. 58. (11) action, actions, affections, affectionate, election, missionary, evasion. (14) fashion, fact, affectionate, federation, fiction, generation, mission, missionary, nation, nations, national, physician, registration, relation, relations, section, sections, session, vacation, vision, evasion. (15) selection, dictio, vacation. (18) election, selection. (27) mention. (49) selection, actions, nations, relations, section, sections, session. (51) physician, registration.

Par. 59. (11) favored, liked, helped. (14) based, blessed, checked, dressed, finished, fitted, fixed, feared, laughed, marked, missed, mixed, packed, passed, figured, remained, placed, raised, reached, saved, traced, visited, praised, labored, raced, risked, glared, shaped, tapered. (15) guessed. (18) scared. (19) glared. (20) figured. (21) marked, worked. (24) desired. (26) fitted, dated, treated, visited. (27) remained, mentioned. (29) liked, timed. (37) placed, tapered. (38) blessed, labored. (41) changed, formed, shipped. (49) desired, saved, scared. (51) based, blessed, dressed, guessed, missed, passed, placed, raised, traced. (53) caused, favored, partured, published. (57) fixed, mixed.

Par. 60. (11) gave, give, giving, given, let, letting, letter, until. (12) name, naming, named. (14) next. (15) gives. (27) morning, woman, woman's. (37) presence, present, presented, presenting, presentation, presents. (49) also, gives, next, presents, soon, still, woman's. (59) begged, named, presented.

Par. 61. (11) ago, forgive. (12) candy. (14) anyone, begin, began, beginning, begins, increase, increased, increases, increasing. (15) undertake. (17) candidate. (19) increase, increases, increased, increasing. (21) welcome, overwork. (26) candidate. (49) informs, increase, increasing. (51) increased. (52) increases. (59) increased, informed.

(Next month, Automatic Review in Chapter III.)

## Business Education Calendar

### February

- 17 Annual Conference of Indiana Commercial Teachers, Muncie.
- 17 High School Commercial Teachers Association of New Jersey, Elizabeth.
- 21-24 National Occupational Conference, Cleveland.
- 24 National Association of Commercial Teacher Training Institutions, Cleveland.
- 24-28 N. E. A. Department of Superintendence, Cleveland.

### March

- 1 N. E. A. Department of Superintendence, Cleveland.
- 3 New York City Gregg Shorthand Teachers Association, New York.
- 14-17 Pennsylvania State Education Association, Southeast District, Philadelphia.
- 17 Arkansas Valley Commercial Teachers Club, Wichita, Kansas.
- 28-31 Eastern Commercial Teachers Association, Boston.

## Business Education Honorary Societies

The roster of the national honorary societies in this field includes the names of Beta Gamma Sigma, Pi Omega Pi, Gamma Rho Tau, Alpha Iota, Phi Theta Pi, and Pi Rho Zeta. A record of commercial education activities that did not include these honorary societies would be far from complete. The September and November, 1933, issues of the *Business Education World* contained brief descriptions of five of these societies. We shall appreciate receiving the names of other similar national societies that should be included in the list given above.

### Beta Gamma Sigma

THE only honor society in commerce and in business administration recognized by the American Association of Collegiate Schools of Business. Founded in 1907 at the University of Wisconsin. Incorporated as a national society February 26, 1913.

In 1933 Gamma Epsilon Pi, a commercial education sorority, founded at the University of Illinois, was merged with it.

The Society has forty active chapters. Membership is open to both men and women.

Officers: Grand President, Dean J. Anderson Fitzgerald, University of Texas, Austin; Grand Vice President, Dean J. E. Le Rossignol, University of Nebraska, Lincoln; Grand Secretary-Treasurer, Professor J. W. Jenkins, University of Georgia, Athens.

The official publication of the Society is the *Beta Gamma Sigma Exchange*, issued quarterly. Its present editor is John Wilkinson Jenkins.

We quote from No. 3, Vol. XVI, of this quarterly, issued during the summer of 1933, a portion of an article on the early history of Beta Gamma Sigma, by Dr. F. H. Elwell.

Beta Gamma Sigma, the national honorary fraternity in commerce, was formed February 26, 1913, through a consolidation of three local honoraries—the Economics Club of the University of California, Delta Kappa Chi of the University of Illinois, and Beta Gamma Sigma of the University of Wisconsin.

Although organized in 1913, it was not until January, 1916, that the next chapter was installed in the Wharton School. Then, when Dr. McCrea went to Columbia, a chapter was installed there in May, 1917. Two chapters were installed in 1918—at the University of Georgia and at the University of Washington. In 1920, chapters were installed in Iowa, Pittsburgh, and Northwestern; in 1921, at Oregon, Minnesota, and Washington Universities; in 1922, at Cincinnati, Syracuse, Ohio State, and Texas; in 1923, at Indiana and Southern Cali-

fornia; in 1924, at Nebraska; in 1925, at Boston University; in 1926, at North Dakota, Denver, Kansas, and Tulane; in 1927, at Georgia Tech; in 1928, at Kentucky; in 1929, at Marquette and Virginia; in 1930, at Michigan and Florida; in 1931, at Alabama and Missouri; in 1932, at Arkansas and Buffalo; and so far, in 1933, at North Carolina, Washington and Lee, New York, Louisiana, Southern Methodist, and Oklahoma.

Of the member schools in the Association of Collegiate Schools of Business, therefore, we do not yet have chapters at Dartmouth, Harvard, Miami, Chicago, and Stanford.

The *Beta Gamma Sigma Exchange*, the official publication of the fraternity, was authorized by the 1917 Convention, appeared first in March, 1918, was published twice a year up to 1927, and then once each year through 1931. Since 1931, it has been a quarterly.

I believe that through these twenty years as a national honorary society Beta Gamma Sigma has more than proved its value in schools of commerce. The maintenance of its high standards by the several chapters has earned for our society a high place among the university honor societies. In looking at our organization's history and its future, we must realize that Beta Gamma Sigma is not only a comparatively young honorary society, but that it usually has its student members for only a year. In that year the members must be impressed with the value of the organization and therefore there is a tremendous responsibility upon the faculty members, and particularly upon the deans.

### New Officers of Pi Omega Pi

The following officers were elected at the December meeting of Pi Omega Pi:

*President*: Alberta Kappeler, Technical High School, Indianapolis, Indiana; *Vice President*: Caroline Crawford, State Teachers College, Pittsburg, Kansas; *Treasurer*: H. D. Shepherd, State Teachers College, Denton, Texas; *Secretary*: E. G. Blackstone, University of Iowa, Iowa City, Iowa; *Organizer*: Frances R. Botsford, Ball State Teachers College, Muncie, Indiana; *Historian*: Paul A. Carlson, State Teachers College, Whitewater, Wisconsin; *Editor*: Freda Bruns, State Teachers College, Kirksville, Missouri.

## Luther Burbank College of Commerce

**I**N the beautiful city of Santa Rosa, California, public-spirited citizens are showing great interest in perfecting the plans for the Luther Burbank College of Commerce as a memorial to the world's greatest plant scientist. Under the leadership of Mr. and Mrs. Ernest E. Close, this project is being rapidly brought to completion.

On December 1, 1933, a charter for a corporation to establish this memorial was issued.

The five directors—Ernest E. Close, president; Estelle C. Close, first vice president; Warren Thornberry, second vice president; Mrs. Elizabeth Burbank (widow of Luther Burbank), secretary; and Irvine E. Carner, treasurer—have completed the necessary legal procedure to purchase for the Corporation the mansion in which Mr. Burbank was living at the time of his death; also, two acres of land surrounding the building. The accompanying illustration shows the Luther Burbank home, which will house the new college, and a portion of the beautiful grounds. These grounds contain trees and shrubbery of many kinds, planted by the hands of the beloved scientist. They are beautifully landscaped and present a perfect setting for the campus of this memorial college.

As demands warrant, other buildings will be constructed to house students from all parts of the world who will find California, and more particularly Santa Rosa, an ideal place to spend a fall and winter while pursuing a commercial and secretarial training course. Plans are being considered for laying out tennis and basketball courts, and a dormitory.

The Burbank property is located in the heart of the city of Santa Rosa, on the world-famous Redwood Highway, near the Russian River, the vacation land of northern California. Annually, thousands of visitors from all parts of the world are attracted to Santa Rosa, to see the Burbank gardens and home. It is the purpose of this newly formed corporation to continue to keep the gardens blooming and the building open to visitors. They will be shown the office of Mr. Burbank (now the office of the college), and they also may visit the room in which he spent his last hours. This room will contain much of the furniture that was there at the time of his death.

The corporation is a membership corporation, having no capital stock. Many memberships have already been subscribed and many more will be issued to citizens far and wide who have admired the works of Mr. Burbank



HOME OF LUTHER BURBANK

and wish to express their admiration in helping to establish this memorial.

Mr. Ernest E. Close, the president of the corporation, is a man of wide experience as a commercial educator, having spent some sixteen years in this profession. Mrs. Close has dedicated her life to the education of America's youth, as has Mr. Carner. Mr. Thornberry, the junior member of the Board of Trustees, is a graduate of the University of California, and is greatly interested in a higher standard of business education. Mrs. Elizabeth Burbank, a woman of charming personality, is deeply interested in young people, and especially in their education.

Plans are being made for the remodeling of the building for housing the college, and in all probability the new school will be a going concern by May, at which time Close's Modern Commercial College will be merged with the Luther Burbank College of Commerce. The classrooms will be equipped with modern furniture, and the latest office appliances will be installed. The course of study will embrace Gregg Shorthand, typewriting, penmanship, English, business mathematics, commercial law, business administration, salesmanship, elementary and advanced bookkeeping and accounting, economics, banking, finance, and other subjects pertinent to a broad business education.

## School News and Personal Notes



GEORGE M. WEIR

**H**ONORABLE DR. GEORGE M. WEIR has been elevated to the position of Minister of Education and Provincial Secretary for the Province of British Columbia, Canada.

Dr. Weir is one of the best authorities on education on the continent of North America. In 1925, with Dr. J. H. Putman of Ottawa, he completed an exhaustive survey of the school system of British Columbia.

Dr. Weir is a graduate of McGill University and of the University of Saskatchewan. He also holds the degree of D.Paed. from Queen's University.

He came to British Columbia in 1923 as professor of education in the University of British Columbia, which position he held until he was elected to the legislature.

**E**ARL W. BARNHART resigned from the Federal Board for Vocational Education as of December 1, 1933. At the beginning of the fall term of last year Mr. Barnhart was granted a year's leave of absence by the Federal Board to permit him to offer methods courses in commercial subjects in the College of the City of New York.

It is expected that his former position at Washington will be filled through the regular

civil service procedure as soon as the necessary approval of the President can be obtained.

**D**R. EDWIN A. LEE, for many years director of vocational education at the University of California, Berkeley, became superintendent of the San Francisco city and county schools, December 6, 1933. He succeeds Dr. Joseph Marr Gwinn, retired.

Dr. Lee is a graduate of the Chico, California, State Normal School, and received his Ph.D. degree from Columbia University. In 1916, he became assistant professor of vocational education at the Carnegie Institute of Technology of Pittsburgh, the next year joining the faculty of Indiana University as acting professor of vocational education. From 1918 until 1921, he was head of the vocational education department of Indiana University. He came to the University of California in 1921.

In 1912, Dr. Lee was married to Edna Canfield of Chico. The couple have three sons.

Dr. Lee has received nation-wide recognition for his work in the field of vocational education, and his administration of the public schools of a metropolitan city will be watched with great interest.



Photo by San Francisco Chronicle

EDWIN A. LEE

**A**NNOUNCEMENT has been received of the marriage of the former Miss Florence M. Lindsay and Mr. Charles I. Brown, both of Toronto, Ontario, Canada. We join a host of friends in extending to Mr. and Mrs. Brown our hearty congratulations and sincere best wishes.

Mrs. Brown has spent most of her life in Toronto, where she is held in affection and esteem by a large circle of friends.

Mr. Brown is well known in the world of business education. He was formerly associated with the chain of Brown's Business Colleges, founded by his uncle, the late G. W. Brown. For a number of years he has been connected with the Gregg Publishing Company. After several years as that company's field and service representative in the United States, Mr. Brown was appointed managing director of the Gregg Publishing Company, Ltd., London, England.

Mr. Brown returned to the United States in 1926 in order to assume the management of a new branch of the Gregg Publishing Company at Toronto, Ontario, in order that the schools of Canada might receive better and more direct service under his direction. Throughout Canada, as in the United States and Great Britain, he has many friends who join us in our felicitations.

Mr. and Mrs. Brown will make their home at 5 Hubbard Boulevard, Toronto, Ontario.

**M**RS. MARGUERITE D. FOWLER, the new second vice president of the National Commercial Teachers Federation, has been chairman of the commercial curriculum committee for the secondary schools of Louisville, Kentucky, for the past three years. Prior to that time, she was for eight years head of the commercial department of the Atherton High School, of Louisville.

She was admitted to the Kentucky bar in 1915 and is a member of Phi Delta Delta, international honor fraternity for women graduates in law.

Mrs. Fowler's business experience has been that of court reporter, court examiner, and accountant. Her teaching experience has been varied. She has taught all grades, including a university methods course.

**T**HE A. N. PALMER COMPANY has opened an office in the Phelan Building in San Francisco, under the management of J. A. Rohrer.

**C**HESTER H. KATENKAMP, head of the commercial department of the Forest Park High School, Baltimore, Maryland, has been awarded the degree of Doctor of Education by Johns Hopkins University. The subject of his dissertation was "An Experimental Comparison of the Daily Recitation and Work Book Methods of Teaching." The subject matter of the experiment was a try-out course in junior business training.

Dr. Katenkamp is well known as a specialist in the teaching of office appliances. To those interested in this subject, we recommend his address before the Washington meeting of the Eastern Commercial Teachers Association. This address is published in the sixth year-book of that association, under the title "Ideal Equipment for an Office Practice Classroom."

**T**HE Junior Chamber of Commerce, an extracurricular activity composed of the students in the Department of Business Education of State Teachers College, Bloomsburg, Pennsylvania, announces the fourth annual Commercial Contest to be held on Saturday, May 5, 1934. The subjects tested will be: bookkeeping, Gregg Shorthand, typewriting, business arithmetic, and business law. Only one contest will be held in each subject, so only advanced students should be entered.

A new feature of the contest this year will be a short group conference for commercial teachers and students, at which time the films developed at Washington State College for the teaching of shorthand and typewriting will be shown.

Those interested in this contest should write to Harvey A. Andruss, director of the Department.

**P**AUL O. SELBY, who has been on leave of absence, working toward his Ph.D. degree at the State University of Iowa, has resumed his duties as director of commercial education at State Teachers College, Kirksville, Missouri.

**T**HE Contest Journal, sponsored by the New York State Business Education Contest Association, made its first bow to the commercial education public last December. George R. Tilford, professor of business education and secretarial science, Syracuse University, is the editor. For many years he has managed the New York State commercial contests.

Sample copies of the *Journal* may be obtained from Mr. Tilford for 25 cents a copy.

DR. HAROLD GEORGE CAMPBELL is the newly elected Superintendent of Schools of New York City, succeeding Dr. William J. O'Shea, retired after forty-seven years of service in public education.



*Photo by Pach Bros.*

HAROLD GEORGE CAMPBELL

Dr. Campbell was born in the little fishing village of Fraserburgh on the northern coast of Scotland, in the year 1884. His father, a shoe manufacturer, moved his family to America in 1888.

Dr. Campbell was graduated from the Maxwell Training School for Teachers in 1902, and the following year received his first assignment as a teacher of the third grade in the public schools of New York City. In 1910, his career as a high school teacher began with his appointment as a history teacher at Eastern District High School, Brooklyn. In 1920, he became principal of Flushing High School.

In 1924, Dr. Campbell was elected associate superintendent of schools, filling the vacancy left by the retirement of William McAndrew. In 1929, he was elected deputy superintendent.

Dr. Campbell is a well-known author of texts, and a writer of numerous articles on educational subjects. The Royal Italian Government has awarded him the Medal of Merit for distinguished service to education.

Some idea of the magnitude of the kingdom

over which he will rule may be had from the following New York City school statistics for the year 1932-1933: average attendance (day schools only), 1,022,894; teachers' salaries, \$117,559,828; valuation of school properties, \$476,399,683.

JOHN W. NIXON, manager since 1907 of the Heald Business College, San Jose, California, succumbed to a long illness, December 20, 1933.

Mr. Nixon for over a quarter of a century was active in the fraternal, educational, and business life of San Jose. Under his able direction the Heald Business College of that city grew to large proportions, absorbing several other business schools. In addition to managing this school, Mr. Nixon was vice president of the entire chain of Heald Business Schools in the state of California.

A native of Cumberland, Maryland, Mr. Nixon was left an orphan as a child. By the greatest sacrifice and hard work he put himself through the University of Iowa, obtaining a law degree in 1898. In 1899, he married Miss Mayme E. Parker, who survives him.

Mr. Nixon was one of California's most active Masons. He was a member of the Scottish Rite, Knights Templar, Islam Temple of the Shrine, and the White Shrine of Jerusalem.

The Pacific coast has lost a prominent citizen and commercial education, one of its pioneers.

AS we go to press, comes the sad news of the death of John E. Gill, dean of Rider College, Trenton, New Jersey. Death was due to a heart attack. He was sixty-one years old. Surviving him are his wife, the former Nellie M. Goodner, of Nashville, Illinois; two daughters, Mrs. Alexander C. Oliphant, and Mrs. R. Victor Kuser, Jr., and a son, John Goodner Gill.

Mr. Gill was born in Quincy, Illinois, and was graduated with the degree of Master of Accounts from the well-known Gem City Business College. He came to Trenton in 1901 and formed a partnership with Franklin B. Moore, proprietor of the Rider-Moore and Stewart School. This school later became the present Rider College, with Mr. Moore as president and Mr. Gill as dean.

The March issue will carry a fitting tribute to this outstanding educator.

## Our Cover Design

THE cover design for February shows an interesting though not a comprehensive view of Philadelphia, the third largest city in the United States. Philadelphia is too large to be captured in one photograph, even when taken from an airplane at a height of 6,000 or 7,000 feet.

Now to get our bearings. The tower directly above *F* in "February" is atop the City Hall, and rises to a height of 548 feet. At the very pinnacle is a huge bronze statue of William Penn, which cannot be seen clearly in the picture.

The broad boulevard leading directly from the City Hall and terminating at a group of buildings in a park is the famous Fairmount Parkway. The group of buildings at its upper end houses the Pennsylvania Museum of Art. A stretch of the Schuylkill River may be seen directly to the left.

The circle about midway of the Boulevard is known as Logan Circle. The large white building just below the circle and facing the train sheds is the new Suburban station of the Pennsylvania Railroad. The towering white building underneath is the Girard Trust Company.

The word "February" starts on the side of the huge mercantile establishment of John Wanamaker. The Bellevue-Stratford Hotel, facing on Broad Street, is located at the lower left of the picture, and may be recognized by the interesting gables and turrets forming a part of the upper stories. The Ritz-Carlton Hotel is the large white building across the street, to the right. Fairmount Park may be seen faintly in the upper right corner. The building directly above, and to the right of Logan Circle, is the Public Library.

Philadelphia comes rightfully by its title of "The World's Greatest Workshop," because it produces a greater number of vitally essential articles, and fashions more of the world's necessities, than any other municipality.

Philadelphia is set down within a ring of nature's bountiful gifts. Coal, steel, and cement, for instance, are produced in the greatest quantities in the world right at the door of Philadelphia. Naturally, then, Philadelphia's establishments have fashioned these for generations to such good effect that this city leads the world in the production of steel ships, locomotives, street cars, various lines

of hardware, storage batteries, and other essentials.

*Next month, Boston.*

## Two Federal Agencies United

THE union of two major Federal agencies concerned with the promotion of education in the United States under the Department of the Interior is announced by Harold L. Ickes, Secretary of the Interior.

By official order, the functions of the Federal Board for Vocational Education are transferred to the United States Office of Education in the Department of the Interior.

Dr. George F. Zook, United States Commissioner of Education, will direct the activities of the enlarged Federal Office of Education.

Secretary Ickes announces:

This transfer of the functions of the Board is not to be interpreted as any curtailment of the activities of the Federal Government in the field of vocational education. Both Commissioner Zook and I have long been deeply interested in vocational education, and we both propose to promote the development of this highly important part of the field of education vigorously.

Secretary Ickes changed the designation of Dr. J. C. Wright from "Director, Federal Board for Vocational Education," to "Assistant Commissioner for Vocational Education" with "no change in duties."

The united educational services are now housed on six floors of the Hurley-Wright Building at the corner of Pennsylvania Avenue and 18th Street, two blocks west of the White House. This is the temporary home to be occupied until other space in Government buildings is available.

With the uniting of the staffs of the vocational education organization and the Federal Office of Education, the *School Life* magazine becomes the mouthpiece for the combined Federal interests in education. *School Life* has been the official journal of the Federal Office of Education for fifteen years.

*Note:* At the time this issue of the *Business Education World* went to press, Dr. Zook had not filled the position of Specialist in Commercial Education.—*Ed.*

# Commercial Education Research Abstracts

By Dr. E. G. BLACKSTONE

Director, Commercial Teacher Training, The State University of Iowa

*In order that educators may become better acquainted with the research studies that have been made in the field of business education, a number of abstracts of the more important studies are being published each month in this magazine.*

## Bookkeeping Studies

(Continued)

**"ARITHMETICAL ABILITIES REQUIRED IN HIGH SCHOOL COURSES IN BOOKKEEPING,"** by Edward Frederick Potthoff, Master's Thesis, University of Chicago, 1924.

**Purpose.** To determine the quantity and quality of the arithmetical abilities that a pupil must possess and use in taking a high school bookkeeping course.

**Procedure.** Six commonly used bookkeeping text books were analyzed for arithmetical calculations, together with accompanying sets, business papers, etc.

**Findings.** Of all the problems, addition involved 44.76, subtraction 22.04, multiplication 21.89, division 2.54, percentage 4.53, and fractions 4.24 per cent. The list included 16 specific uses for addition, 8 for subtraction, 2 for multiplication, 2 for division, 7 for percentage, and 3 for fractions. Tables show all these specific uses.

Except for addition, the part played by the various classes of problems varies greatly in the textbooks studied.

In addition, problems generally involve 3-, 4-, 5-, and 6-place numbers, with 2 addends. Subtraction ordinarily involves 3-, 4-, 5-, 6-, and 7-place minuends. In multiplication, 1-, 2-, and 3-place numbers predominate. In division, 3-, 4-, 5-, and 6-place dividends and 1-, 2-, 5-, 6-, and 7-place divisors are most frequent.

Percentage usually involves 3-, 4-, 5-, and 6-place numbers and 1, 2, 3, 5, or 6 per cent. Fractions involve only multiplication, the multiplicands consisting of 2-, 3-, and 4-place numbers and the multipliers of 1-, 2-, and 3-place numbers with  $\frac{1}{2}$ ,  $\frac{1}{3}$ , or  $\frac{1}{4}$ .

The quality and variety of arithmetic needed for bookkeeping seem rather limited.

**Evaluation.** The study seems to be statistically adequate. One might question any procedure of determining arithmetical training on the basis of frequency only, for a calculation may

be vitally important although infrequently met. The study does not concern itself with determining where the essential training is to be secured, whether through the mathematics department of the high school, a course in commercial arithmetic, or through direct training by the bookkeeping teacher. It raises a question, however, whether bookkeeping or commercial teachers, untrained in the complex processes of teaching even these apparently simple calculations, would be successful in teaching them when mathematics teachers have failed to do it.

**THE COMPARATIVE MERITS OF SINGLE AND DOUBLE PERIODS IN BOOKKEEPING INSTRUCTION,** by Edward L. Cooper, Master's Thesis, University of Iowa, 1931.

**Purpose.** To determine whether or not pupils accomplish more or less in bookkeeping with one period a day than with two periods a day.

**Procedure.** A bookkeeping test prepared by Paul A. Carlson, consisting of 440 items, was given as part of a state survey of bookkeeping, under the direction of the Whitewater State Teachers College. The test was given for 14 minutes (Plan 1), the answers being written with pencil. The next day the students were permitted to continue with the test and take time enough to finish (Plan 2), this writing being done with pen.

The test covered recording, adjusting and closing entries, fundamental principles, working sheet, classification of accounts, business practice, and bookkeeping terminology. A total of 174 schools participated, 82 of them using both plans; 3,126 pupils took the test under Plan 1 and 2,308 under Plan 2.

A questionnaire was sent out the following year to secure detailed procedure and practices, 106 replies being secured.

*Findings.* The median score for double periods (Plan 2) was 302 points. For single periods it was 291, a difference of about 11 per cent.

The median score for double periods (Plan 1) was 100 points. For single periods it was 102.

Scores for small towns and very large towns were higher than those for the medium-sized towns.

It is recommended that double periods be discontinued.

*Evaluation.* The study involves a wide sampling of cases and is probably valid. The tests were constructed by a well-known specialist in this field, and while no figures as to validity or reliability are given, other tests by this author have been proved both valid and reliable. The results of this study should be used to revise the traditional method of using double periods.

**A STUDY OF BOOKKEEPING TEXTBOOKS, THEIR HISTORICAL DEVELOPMENT, AND THEIR RELATION TO BOOKKEEPING PRACTICE, by Gertrude Meerwein, Master's Thesis, New York University, 1928.**

*Purpose.* To determine, through a study of bookkeeping textbooks, how bookkeeping instruction has developed, and its relation to bookkeeping practice; also the outstanding present-day tendencies in bookkeeping instruction as indicated by leading texts, and possible improvements in texts of today.

*Procedure.* From the combined judgments of a class of teachers and two university professors, a list of 21 points was prepared by which to evaluate texts.

Books were analyzed in three chronological groups, as follows: 12 books appearing before 1820, 11 books appearing between 1826 and 1899, and 14 books appearing between 1900 and 1928.

*Findings.* The earliest treatises were written entirely from the adult viewpoint. Up to 1820, the texts were written chiefly for private instruction.

Provision for class instruction came between 1821 and 1899. During this period, emphasis shifted from foreign-trade and commission business to bookkeeping for retail and wholesale stores. The "set" was introduced.

Books of the present period emphasize the importance of bookkeeping and its relations to business management. Short sets are replacing long ones. Overuse of business papers is being avoided. Texts are simpler in style and are more readable. Illustrations and graphs are being utilized.

*Evaluation.* This is an elaborate study of many texts. It contains many items of historical interest.

**A COMPARISON OF EIGHT BOOKKEEPING TEXTBOOKS IN TERMS OF CERTAIN SUGGESTED PRINCIPLES OF TEXTBOOK SELECTION, by William J. McGuire, Master's Thesis, School of Education, New York University, 1931.**

*Purpose.* To aid school administrators in selecting bookkeeping textbooks by suggesting a set of guiding principles and a technique for applying them.

*Procedure.* The eight bookkeeping textbooks that are listed for use in New York City for first-year bookkeeping were analyzed.

Tentative principles of selecting bookkeeping textbooks were prepared and were then discussed by ten bookkeeping teachers doing graduate work at New York University and by ten bookkeeping teachers in New York City. As a result, the following list of principles was selected: purpose, unity, accuracy, relative values, uniformity and variation, correlation, growth, economy, use, adaptability, and comprehension. Then each book was examined for the following units: purpose, approach, sequence of topics, space devoted to each topic, uniformity of terminology, exercise material, illustrations, pupil aids.

*Findings.* In the 8 books, 27 purposes were found, most of them in agreement with the New York syllabus. Educational values were heavily stressed, as was the use of bookkeeping as a means of managing and interpreting.

Common topics numbered 33, for 12 of which there was disagreement as to sequence. A suggested sequence is given. Wide variations were found in the amount of space per item. The terminology is fairly well settled. The difficulty of vocabulary differed little. The short unit exercise is most favored. The number of illustrations ranged from 123 up to 618.

*Evaluation.* This is a remarkably complete and ingenious thesis. Some of the techniques for measuring the principles show a high degree of resourcefulness. The criterion (22 teacher judges) is of uncertain validity. The author does not provide a scale of weights for the various items, nor does he provide any composite ratings for the several books, so it is difficult to compare one with another. Nevertheless, this is a step toward preparing rating scales for textbooks in bookkeeping.

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**PSYCHOLOGISTS** at the University of California have just completed a series of tests showing that the speed of mental processes has no correlation with intelligence. The slow thinker, they have found, is not necessarily dull; nor, on the other hand, is the fast thinker superficial.

## Reference Books for Business Teachers

By JESSIE GRAHAM, Ph.D.

Assistant Professor of Commerce, State Teachers College, San Jose, California

(Continued)

### DICTIONARIES Biography (Continued)

**WHO'S WHO IN AMERICA**, edited by A. N. Marquis, The A. N. Marquis Company, Chicago, Vol. 17, 1932-1933, 3,568 pp., \$12. (Revised and issued biennially since 1899.)

A biographical dictionary of notable living men and women of the United States.

**WHO'S WHO IN AMERICAN EDUCATION**, Robert C. Cook Company, New York, 1932, \$8.50. (Issued 1929-1930 and 1931-1932. Volume IV issued in 1932.)

Biographical listing of 6,500 names. Titles of dissertations for Ph. D. degree are given.

*Note:* There are many other annual biographical dictionaries made available by various publishers. Sections of the United States, religious bodies, professions, foreign countries—all have "Who's Whos." "Who Was Who" contains biographies of persons no longer living.

### Birds

**DICTIONARY OF BIRDS**, by Alfred Newton, London, 1,088 pp., 1899.

### Classical Antiquities

**HARPER'S DICTIONARY OF CLASSICAL ANTIQUITIES**, edited by Harry T. Peck, American Book Company, New York, 1,701 pp., \$8. (First published in 1897.)

Articles on topics in classical antiquities, biographies, mythology, geography, art, and history.

### Commercial Terms

**COMMERCIAL NOMENCLATURE**, International Bureau of American Republics, Government Printing Office, Washington, D. C., 1897, 670 pp., \$2.50.

English, Spanish, and Portuguese terms in parallel columns.

### Financial

**FINANCIAL HANDBOOK**, edited by Robert H. Montgomery, The Ronald Press Company, New York, 1933, 1,628 pp., \$7.50.

Contains thirty-six sections on business economics, mathematics of finance, financial statements and reports, budgets, control of current operations, business law and other topics.

**MOODY'S MANUAL OF INVESTMENTS AND SECURITY RATING SERVICE**, Moody's Investors' Service, New York and London, issued annually, 5 annual volumes, \$25 each.

Five annual volumes: (1) Foreign and American Government Securities; (2) Banks and Finance; (3) Industrials; (4) Public Utilities; and (5) Railroads. Monthly supplements are issued. The financial history of each company issuing securities is given, together with statements of securities outstanding and ratings of the stocks and bonds of the company.

**POOR'S MANUAL**, Poor's Publishing Company, New York, issued annually, \$100.

Each annual issue is in four sections: (1) Railroads; (2) Public Utilities; (3) Industrials; (4) Government and Municipal.

### History

**DICTIONARY OF DATES AND UNIVERSAL INFORMATION RELATING TO ALL AGES AND NATIONS**, by Joseph Haydn, G. Putnam's Sons, New York, 1911, 1,614 pp. (First edition, 1841.)

A dictionary of history and general information alphabetically arranged in chronological lists.

**THE NEW LARNED HISTORY FOR READY REFERENCE, READING AND RESEARCH**, by Josephus N. Larned *et al.*, C. A. Nichols Publishing Company, Springfield, Mass., 1922-1924, 12 volumes, \$105.

A dictionary of world history arranged alphabetically with cross-references.

### Insurance

**ANNUAL CYCLOPEDIA OF INSURANCE IN THE UNITED STATES**, G. Reid Mackay, New York, 1928, 600 pp., \$3.

From 1891 to 1913, this book was published as Hayden's Annual Cyclopedias of Insurance. Contains material relative to terms and companies and includes biographies.

**BEST'S INSURANCE REPORTS**, A. M. Best, New York, issued annually in May. Three reports: casualty and miscellaneous; fire and marine; and legal reserve companies and fraternal societies. Together with Best's Insurance News, these three issues are \$30, \$25, and \$25, respectively.

### Law

**BOUVIER'S LAW DICTIONARY**, by William E. Baldwin, The Banks Law Publishing Com-

pany, 1929, 1,245 pp., \$7.50. (Rawle's third revision, 2 volumes, \$15.)

The standard American law dictionary.

### Music

**GROVE'S DICTIONARY OF MUSIC AND MUSICIANS**, by Sir George Grove, The Macmillan Company, New York, 1928, set of six volumes, \$40. (The sixth volume, edited by Waldo Pratt, is the American Supplement, 438 pp., \$7.50.)

Contains brief biographies of 1,700 persons with fuller treatment of 700 names.

### Pronunciation

**DESK-BOOK OF TWENTY-FIVE THOUSAND WORDS FREQUENTLY MISPRONOUNCED**, by Francis H. Vizetelly, Funk & Wagnalls Company, New York, 1919, 942 pp., \$2.

This book embraces English words, foreign terms, Bible names, personal names, proper names current in literature and the arts.

**PRONUNCIATION OF TWELVE THOUSAND PROPER NAMES**, by Mary S. Mackey and M. G. Mackey, Dodd, Mead and Company, 1922, 329 pp., \$2.50.

The correct pronunciation of geographical and biographical names, names of books, works of art, characters in fiction, and foreign titles are given in this publication.

### Quotations

**FAMILIAR QUOTATIONS**, by John Bartlett, Little Brown & Company, Boston, 1927, 1,454 pp., \$5.

Familiar quotations grouped according to authors and indexed under principal words in quotation.

### Rhymes

**RHYMING DICTIONARY OF THE ENGLISH LANGUAGE**, by John Walker (revised and enlarged by Laurence H. Dawson), Routledge, London, 1924, 549 pp., 7s. 6d.

Beginning with twenty words rhyming with *Baa* and finishing with twenty-one words ending in *s*, this rhyming dictionary gives a definition or synonym for each word presented.

### Scientific

**Note:** Changes in the field of science occur so frequently that reference work has to be done largely through periodical literature. Indexes to periodicals and abstracts of new books furnish, perhaps, the most helpful reference material in science. Scientific dictionaries render valuable service in certain lines of study, however.

**AMERICAN ILLUSTRATED MEDICAL DICTIONARY**, by William A. N. Dorland, W. B. Saunders Company, Philadelphia, 1932, 1,493 pp., \$7. (Revised biennially.)

A dictionary of the terms used in medicine, surgery, dentistry, pharmacy, chemistry, biology, etc.

**DICTIONARY OF APPLIED CHEMISTRY**, by Sir Edward Thorpe, Longmans, Green and Company, New York, 1922-1927, 7 volumes, \$20 per volume.

The standard dictionary of chemistry in English with long articles and bibliographies.

**GLOSSARY OF BOTANIC TERMS**, by Benjamin D. Jackson, J. B. Lippincott Company, Philadelphia, 1928, 481 pp., \$5.

**PHARMACOPOEIA OF THE UNITED STATES OF AMERICA**, by a committee of the United States Pharmacopoeial Convention, J. B. Lippincott Company, Philadelphia, 1925, 626 pp., \$4.

**A DICTIONARY OF SCIENTIFIC TERMS**, by I. F. Henderson and W. D. Henderson, Oliver and Boyd, London, 1929, 352 pp.

Pronunciation, derivation, and definition of terms used in the various fields of science.

### DIRECTORIES AND GUIDES

**AMERICAN NEWSPAPER ANNUAL AND DIRECTORY**, N. W. Ayer and Son, Philadelphia, 1880 to date, 50 volumes, \$15 per year.

Statistics of population, time maps, catalogue of American newspapers and other periodicals, with gazetteer information about states and cities.

### YEARBOOKS AND STATISTICAL REPORTS

**AMERICAN YEARBOOK**, Doubleday, Doran & Company, Inc., Garden City, New York, issued annually, 9 volumes, \$7.50 per volume.

Narrative accounts of the events of each year signed by specialists.

**COMMERCE YEARBOOK**, United States Bureau of Foreign and Domestic Commerce, Government Printing Office, Washington, 1923 to date, \$2.50 per year.

Detailed information on business conditions in the United States with comparative world statistics.

**FIFTEENTH CENSUS OF THE UNITED STATES**, United States Bureau of the Census, Government Printing Office, Washington, D. C., 1930. (With abstract and statistical abstract.) Classified Index of Occupations, 1930, 205 pp., 50 cents; Alphabetical Index of Occupations, 527 pp., \$1.

**STATISTICAL ABSTRACT OF THE UNITED STATES**, United States Bureau of Foreign and Domes-

tic Commerce, Government Printing Office, Washington, D. C., 1878 to date, 50 volumes, \$1 per volume.

Statistics in tabular form treating of various phases of life in the United States. Many foreign governments issue similar statistical yearbooks.

WORLD ALMANAC, The World, New York, 1868 to date, 45 volumes, paper, 50 cents; cloth, \$1 per volume.

An American almanac of miscellaneous information with many statistics.

### OTHER REFERENCE WORKS

In addition to the reference works cited in the above list, there are many others with which the teacher of business subjects should be acquainted. Following is a partial list of such publications:

Encyclopaedia Britannica.

New International Encyclopedia.

United States Official Postal Guide.

Bullinger's Post Office, Express, and Freight Guide.

Leonard's Guide.

Cambridge History of English Literature.

Cambridge History of American Literature.

Warner Library of the World's Best Literature.

Bulletin of the Public Affairs Information Service.

New York Times Index.

The Market Data Book.

The Publishers' Weekly.

Mailing List, Directory and Classified Index to Trade Directories.

Bradstreet's Book of Commercial Ratings.

Dun's Reference Book and Key.

Monroe's Cyclopedic of Education.

Educational Directory.

Almanach de Gotha.

A Manual of Style of the University of Chicago.

### N. E. A. Proceedings

THE Proceedings of the seventy-first annual meeting of the National Education Association, Volume 71, contains a wealth of material for a study of current educational trends and developments and is invaluable to educators for general reference purposes. Commercial teachers will find in it a complete report of the Chicago meeting of the N. E. A. Department of Business Education.

The following addresses and reports have been selected from the table of contents because of their special significance in the field of business education:

"Common Faults in Graduate Research in Education," Percival M. Symonds, Teachers College, Columbia University, New York, N. Y.

"The Changing Curriculum in Secondary Schools," Leonard V. Koos, Professor of Secondary Education, University of Chicago, Chicago, Illinois, and Associate Editor, National Survey of Secondary Education.

"Commercial Subjects in the Changing Curriculum of the High School," Lloyd L. Jones, Berea, Ohio.

"The Sword over Education," Glenn Frank, President, University of Wisconsin, Madison, Wisconsin.

"Next Steps in the Improvement of Teacher Training," Charles H. Judd, Dean, School of Education, University of Chicago, Chicago, Illinois.

"A Program of Development in the Education of Teachers," M. E. Haggerty, Dean, College of Education, University of Minnesota, Minneapolis, Minnesota.

### Vocational Progress Cannot Be Predicted, Study Shows

RVING LORGE, in *The New York Times* for November 19, 1933, reported the results of an eight-year study by the Institute of Educational Research at Teachers College, Columbia University, of the predictive value of tests purporting to measure intellect, clerical ability, and mechanical adroitness and the significance of school records of "scholarship," "conduct," and "attendance." To do this, 2,500 New York City children fourteen years and more old were tested in 1921 and 1922, and their records followed for eight years, that is, until each child had attained the age of twenty-two or over. Over 2,000 of the original group were successfully followed up.

#### Conclusions of Study

A score on an intelligence test of an hour or less predicts future educational success better than the progress record of approximately eight years in school, and nearly as well as teachers' estimates of conduct or ability.

When, however, we direct our attention to the prediction of vocational careers, we find that no fact at or near age fourteen, or best combination of facts, will predict vocational success. . . .

Among those who engage in mechanical work, success in school to age fourteen and scores in intelligence tests at that age are nearly valueless and nearly equally so in predicting earnings, level of work, and interest in job at age twenty to twenty-two. . . . The judgments of the counselor would have had about 98 per cent as large errors as if he had made them by pure guess.

Success at clerical work at age twenty-one is predicted relatively much better than success at mechanical work or mixed work, but still very inadequately.

On the whole, it is safe to infer that boys and girls who are above the average in any of our tests or any feature of school success will do relatively better at clerical work than at mechanical work. . . . It is the less skillful and less scholarly who profit by choosing mechanical work.

# A New Appraisal of Business Education<sup>1</sup>

By J. O. MCKINSEY

Professor of Business Policies, School of Business, University of Chicago

**K**NOWLEDGE of routine and techniques is a very small and insignificant part of the necessary equipment for rendering useful service in a business.

During recent years the leaders of commercial education have given serious thought to the development of a new approach to the problem of business education. They have sought to appraise anew the objectives of commercial education and to develop new types of training for reaching these objectives. I think they have come to realize that their primary problem is not in determining the kind of subject matter that should be placed in courses of study, or the titles by which courses should be named, but in determining how to develop the proper attitude of mind and the proper type of thinking on the part of their students.

As a challenge to the thinking of those who are seeking to make progress in this new type of commercial education I submit for consideration the following objectives of this field of education:

## A New Statement of Objectives

1. To give the student an awareness of the nature and complexity of the economic organization of which he must become a part. He should be led to see that this organization is subjected to continuous and rapid change, and that, consequently, it is impossible to carry on business operations in terms of formulas. He should see that each individual entrepreneur is affected by a wide range of influences that are not subject to his individual control and, consequently, he must seek continuously to determine the nature and extent of these influences and adjust his operations in accordance with them.

2. To train the student how to analyze and interpret business problems and form decisions on the basis of this interpretation. The primary task of the business man is to solve business problems. These problems may be simple or complex according to the nature of the respon-

sibilities of each individual, but they are ever present and important. In fact, we usually have machines to perform those operations that do not give rise to the necessity for solving problems. The human element is valuable only where it can be used in the solution of problems. The educator should realize that one of his primary responsibilities is to teach the student how to think rather than to memorize the thoughts of others.

3. To give the student a sufficient knowledge of business operations that he may feel he has some familiarity with the type of activities with which he must deal when he enters business life. This can be done only by presenting to the student business problems that are typical of those with which he will deal in business life, and developing from a study of these problems an organized story of business activities.

4. To teach the student how to use a few tools that are useful in all types of business positions, so that he may be more valuable to his employer while he is serving his apprenticeship period.

## Thinkers Must Be Trained

I believe, seriously, that our whole economic organization is entering into a new era, and that the problems of business management will become increasingly interesting and increasingly difficult during the next few years.

There will be more urgent need than ever before for men who have been trained to think soundly, and who will use their talents in co-operative effort to save an economic organization that has been tottering on the brink of failure.

It seems to me that business education could not possibly labor in a more worthy cause than to endeavor to make students, whether they be young or old, aware of this situation, and to give them some training in the type of thinking that is necessary for its solution.

If we make the most of this opportunity, we can make commercial education a most useful agency for promoting both economic and social welfare.

<sup>1</sup>From an address, "Business and Education," delivered by Professor McKinsey at the 1933 University of Chicago Conference on Business Education.

# Key to the Shorthand Plates

In the February "Gregg Writer"

## Ink Has a History

From a Circular on Inks (No. 400) issued by the U. S. Department of Commerce Bureau of Standards

Nobody can say how early in his long history man began to use signs and symbols to serve as reminders<sup>20</sup> to himself, and to convey information to his fellows. No doubt the earliest of such signs were piles of<sup>40</sup> stone, and the broken twigs we still use to mark an unfamiliar trail. The spirited though crude drawings left on the<sup>60</sup> walls of European caves by the men of earlier cultures than ours show that primitive man was akin to<sup>80</sup> us. Worse art is to be seen today on walls in public waiting rooms, especially along the lines of suburban<sup>100</sup> trolley roads.

The walls of caves, flat rocks on the faces of cliffs, clay tablets, sheets of wax, and pieces of ivory,<sup>120</sup> bone, and skin have all been used for writing upon. Even today a college diploma is a sheep-skin in<sup>140</sup> name if not in fact, and tattooing has not died out. For centuries parchment was the material on which many<sup>160</sup> books were written, but the papyrus roll was common enough to have given us the word "paper." These materials<sup>180</sup> were expensive and could not be obtained in large quantities, and there could have been no greater development<sup>200</sup> of printing, or much letter writing, if paper had not been invented.

We may never know what was first used<sup>220</sup> for writing ink. It may have been the juices of berries, or perhaps the colored earths that were stirred up with water<sup>240</sup> and used as war paint.

About twelve hundred years before the Christian Era the Chinese are said to have begun to<sup>260</sup> make what is usually called India ink, by mixing soot with a solution of glue or of a plant gum.<sup>280</sup> This pasty mixture was made into cakes which were dried. When some ink was needed for writing, the end of the cake was<sup>300</sup> rubbed with water in a shallow dish. The nature of this ink made it necessary to write with a brush.

Leather<sup>320</sup> tanned with bark was known before the Christian Era, and the staining of wet leather by contact with iron must have<sup>340</sup> been noticed often. Yet the world waited for more than two thousand years after the discovery of India<sup>360</sup> ink, or until about 1126 A. D., before tannin and iron were combined to make<sup>380</sup> writing ink. This kind of ink is still used in larger quantities than any other. The ink was made by dissolving<sup>400</sup> ferrous sulphate (copperas or green vitriol) and glue

in an infusion of nutgalls, which contains a kind<sup>420</sup> of tannin that is especially suitable for making ink.

The infusion of nutgalls was allowed to ferment,<sup>440</sup> the other materials were added, and the mixture was allowed to stand for a time. When it was quite black,<sup>460</sup> it was used as ink. The change in color was caused by the action of oxygen from the air upon the iron<sup>480</sup> salt. Ferrous iron forms with tannin an easily soluble compound that is not intensely colored, but the<sup>500</sup> ferric compound formed by the oxidation is black and nearly insoluble in water. Ink made by this process<sup>520</sup> was a muddy fluid in which floated innumerable microscopic particles of the black ferric compounds.<sup>540</sup> The glue, or the plant gum if it was used instead, helped to keep the particles from settling to the bottom of<sup>560</sup> the fluid, and later served to fasten them to the paper or parchment.

In those days there was no thought of chemical<sup>580</sup> control of the manufacturing process, nor any chemist who could have supervised it. Not until<sup>600</sup> 1748, when William Lewis began to experiment, was any attempt made to produce<sup>620</sup> a balanced ink, with nearly correct proportions of iron and nutgalls; and even in his time there were no<sup>640</sup> analytical methods to help him. Though he had to work by the cut-and-try method, he tried.

As each ink maker<sup>660</sup> used the formula he considered the best, but had no idea of the amount of tannin in the galls, or<sup>680</sup> of the purity of his ferrous sulphate, many a batch of ink must have been far from balanced in composition.<sup>700</sup> This state of affairs is reflected by the condition of various old documents preserved in European<sup>720</sup> libraries and elsewhere. The writing of some is still legible, and the parchment or paper in good<sup>740</sup> condition. In others the paper is more or less eaten through by the ink, which, it is generally believed,<sup>760</sup> contained too much sulphuric acid, which does not evaporate, and which has a sort of charring effect upon<sup>780</sup> paper. Another explanation is that iron oxide formed from the ink destroyed the paper in the same way<sup>800</sup> as a rusty nail attacks a piece of wood. Whatever the real cause, it is said that in extreme cases only<sup>820</sup> the unwritten margins of the pages are left, for the rest of the paper has crumbled away.

Early in the<sup>840</sup> nineteenth century a change

was made in the manufacture of writing ink. Instead of deliberately<sup>80</sup> allowing it to oxidize and be turned into a muddy fluid, it was guarded from the action of the air<sup>80</sup> and kept clear as long as possible. When a batch is made, nowadays, it is allowed to remain undisturbed for<sup>80</sup> a time so that solid impurities will settle to the bottom, but only a small part of the iron salts<sup>90</sup> in a vat containing some hundreds of gallons of ink will become oxidized.

The coloring matter in the<sup>90</sup> older inks consisted of black particles that remained to a great extent upon the surface of the paper.<sup>90</sup> The clear inks soak into the fibers of the paper, or between them, and then become oxidized. For this reason<sup>90</sup> it can be argued that the clear inks should be the more permanent, because so little of the writing is on the<sup>100</sup> surface where it can be rubbed off. To keep the ink clear as long as possible, it must be kept from oxidation,<sup>100</sup> and must also contain a small quantity of free hydrochloric or sulphuric acid. The more free acid<sup>100</sup> the ink contains, the longer it will remain clear, but the greater will be its destructive effect upon paper,<sup>100</sup> and its corrosive action on steel pens. There must be some sort of compromise if the use of iron gallotannate<sup>100</sup> (or iron gall) ink is not to be abandoned. Our ancestors a few generations back were not concerned<sup>110</sup> with the acidity of their ink. It was muddy anyhow, and they had no steel pens to be corroded. The<sup>110</sup> fountain pen with its noncorrodible point puts a temptation in the path of the ink maker, who knows what an<sup>110</sup> extra amount of acid will do for him in keeping the ink clear. (1152)

## Curious Clippings

Yes, this bear came over the mountain, to the consternation of the townsfolk of Yucaipa, and not finding the<sup>80</sup> admiring attention to which he had been accustomed while in his city cage, he disconsolately climbed a<sup>40</sup> friendly lamp post "to see what he could see." And there he clung until lassoed and once more given his "freedom."

Poor lonesome<sup>60</sup> Bruin had not appreciated the kindly intention of President Gentry of the California<sup>60</sup> Fish and Game Commission in releasing him, along with five of his fellow captives, to return to their native<sup>100</sup> haunts—the first step in Mr. Gentry's plan to rehabilitate the wild life of the Golden State. (114)

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Natural steam from Kilauea Volcano is being used to heat one of the new hotels in Hawaii.<sup>80</sup> The steam itself cannot be let into the pipes direct because it contains corrosive acids; but steam vents are<sup>40</sup> being tapped by holes drilled into the rock, and the steam flowing into a boiler heats the water in its pipes.<sup>60</sup>

Volcanic steam is used for heating in Japan, New Zealand, and Iceland, the report says, and to generate electric<sup>80</sup> power in Italy and California. (89)

## Plants That Starve for Iron

From "Popular Research Narratives"

Compiled by Alfred D. Flinn, of Engineering Foundation

(Copyright by the Williams and Wilkins Company, of Baltimore)

More than a decade ago the pineapple growers of Hawaii were confronted by a very perplexing<sup>80</sup> problem. Plants grown on certain Hawaiian soils unusually rich in manganese were always yellow, or<sup>40</sup> chlorotic, and would not produce good crops. The growers figured that, if they only knew the reason and could get a<sup>60</sup> remedy, large additional areas would be available for this paying industry.

About this time, in<sup>80</sup> Puerto Rico, an observation was recorded and some scientific work done that finally gave the desired<sup>100</sup> reason and the needed remedy. Growers there had observed that pineapples grown on calcareous soil were<sup>100</sup> always yellow and of poor growth. In 1911, Mr. Gile, Agricultural Chemist for the<sup>140</sup> Puerto Rico Station, showed that this chlorotic condition was due to the inability of the pineapple<sup>160</sup> to absorb sufficient iron from these lime-rich soils. The lime rendered the iron too slightly soluble for absorption.<sup>180</sup> He also showed that the plant grew perfectly on these soils if iron sulfate were sprayed on the leaves. In other words,<sup>200</sup> instead of feeding the salts through the roots, as is usual, he fed through the leaves.

The growers of Hawaii reasoned:<sup>220</sup> "If the yellowing of pineapples in Puerto Rico is due to iron deficiency, perhaps the same is<sup>240</sup> true of Hawaii." They began spraying with iron sulfate and, sure enough, the plants took on a deep green color and<sup>260</sup> grew vigorously. The application, in several sprayings, of 50 pounds of iron sulfate per year per acre<sup>280</sup> gave perfect growth, but three thousand pounds added to the soil per year did not affect the chlorotic condition. The<sup>300</sup> manganese soils in Hawaii, like the calcareous soils in Puerto Rico, rendered the iron salt insoluble.<sup>320</sup>

The soils of Hawaii, like most soils, are very rich in iron, containing from nine to thirty-three per cent expressed<sup>340</sup> as iron oxide. Plants need but a trace of iron, and yet, in the midst of plenty, these pineapples were starving.

In<sup>360</sup> 1914, the Hawaiian Islands were canning about two and one-half million cases of pineapples.<sup>380</sup> In 1923, the total output was more than five million cases. Next to sugar cane,<sup>400</sup> pineapple canning is their greatest industry and has an annual value of more than twenty million dollars,<sup>420</sup> an enormous industry for a territory with one-fourth of a million population. The greater part<sup>440</sup> of this

industry was made possible by the simple discovery that pineapples were starved for iron and that<sup>60</sup> this iron could be supplied as a spray through the foliage.

This discovery has proved also that it is a paying<sup>60</sup> practice to use iron sulfate sprays for pineapples on many soils. Gile taught us to modify certain ideas<sup>50</sup> concerning fundamentals in soil fertility. It was commonly assumed in the United States that<sup>50</sup> if a little lime on soils was a good thing, more was better, or at least not harmful. Fortunately, one or the<sup>60</sup> other of two protective conditions have generally existed with these lime prodigals. They have used coarse<sup>60</sup> limestone that reacted with the acids of the soils relatively slowly, scarcely neutralizing the soil, let<sup>60</sup> alone rendering it basic; or they have been working with soils rich in humus, in which iron remains sufficiently<sup>60</sup> available even with a great excess of lime.

Gile's work has led also to the discovery that, in<sup>60</sup> general, plants do better on a slightly acid than on a neutral or alkaline soil. Lime, like most other<sup>60</sup> good things, must be used with moderation.

Very recently it has been found that coniferous seedlings in many<sup>60</sup> Federal nurseries in the western United States, where alkaline soils are common, can be successfully<sup>60</sup> grown only by the application of iron sulfate sprays.

Directly or indirectly, animals and men<sup>700</sup> get most of their salts from plants. A few years ago on certain pasture lands of New Zealand, sheep and cattle developed<sup>70</sup> "bush sickness." "Bush sickness" produced gradual wasting away and final death of animals kept continuously<sup>70</sup> on these pastures. It was later found that if the plants on these pastures were sprayed with iron sulfate and certain<sup>700</sup> other salts, the sickness entirely disappeared. Animals fed upon this vegetation did not get enough<sup>700</sup> iron. The vegetation growing in certain swamp lands of Minnesota is, likewise, too deficient in phosphorus<sup>800</sup> for the use of animals. It is common now to attribute certain types of goitre to deficiency<sup>800</sup> in iodine supplied by the vegetation of different regions. Research in the chemistry of plants is<sup>900</sup> closely related in many ways to the well-being of mankind. (852)—Contributed by William Crocker, Ph.D., Director, Boyce Thompson Institute for Plant Research, Inc., Yonkers, N. Y.

## Automatic Review of Chapter I

A graded arrangement of the vocabulary of the first chapters of the Gregg Shorthand Manual and of "5,000 Most Used Shorthand Forms," showing its review possibilities.

*Par. 14.* (11) dairy, marry, merry, turkey; (12) drama, rainy. *Par. 15.* (11) hurried; (12) attack, headache, lady, ready; (14) married, retail, ticket. *Par. 16.* (11) error, eager;

(14) career, mayor, metal, nickel, maker; (15) taken. *Par. 17.* (12) data, enemy; (14) linen. *Par. 18.* (12) guilty. *Par. 19.* (11) eagle, glee, acre; (14) career, cream, crane, glen, gleam, glean, glare, maker; (15) creed, crate; (18) creek, liquor. *Par. 20.* (11) gray, eager, clay; (14) grain, green, grin, claim, clan, clean, cleaning, nickel; (15) greed, greet, greeting; (23) great. *Par. 21.* (11) ark; (14) dark, mark, marking, milk, turkey. *Par. 22.* (11) hath; (12) hat; (14) met, myth; (15) tick, thick, rat, wrath. *Par. 23.* (11) handy, that, they, with, without; (20) great. *Par. 26.* (12) added, hated, headed, today; (14) needed, detail, limited; (15) treated, rated. *Par. 27.* (11) eliminate, memory; (12) many-money, emanate; (14) eliminate, minute, mimic, remain, remaining, emanate, mineral; (17) minimum. *Par. 28.* (11) her, air, ready, tree; (12) had, eight, him, aid, tea, day, me, may, head, attack, headache; (14) net, need, met, made, make, tin, tan, cat, kid, get, came, mill, train, cream, clean, milk; (15) take, read, ready, lead, rate, late, laid, attack, headache; (17) mean, man; (18) lack, leg; (19) cream; (20) clean; (21) milk. *Par. 29.* (11) like, alike, liking, where-aware, were; (12) any, my, when; (15) little; (26) did-date, dating; (27) meantime. *Par. 31.* (11) he was; (12) I am; (14) that the.

## Easy Business Letters

### On Chapters I-III

Mr. Mark Kelly, Kane, Illinois. Dear Sir: The will of Dick Allen will be read today. When you come, I will be<sup>30</sup> at the train to greet you. At what hour will you be there? Yours truly, (31)

Nettie: Will all the men of the team come to the country today? Gail will be ready at eight to greet them. I will<sup>30</sup> be ready with cake and lemonade. Will they like that? A day here in the country will be a treat. Annie (39)

Ray: When I came to the country I had an attack of headache. The clean country air and fresh milk and cream helped me<sup>30</sup> to get well. I meant to remain a month, but I lacked the time and money. I will go in May. Will you go with me?<sup>60</sup> I can be ready by the middle of the month. Would that date be too late? Dick (54)

Dear Madam: When you come back from your trip, will you help me get ready for the fair? I have been planning for it for<sup>20</sup> a month. If you can help me, I shall be very happy. Yours truly, (32)

Dear Sir: I need money to pay for the goods that the Black Company are shipping me today. Your check will be a<sup>20</sup> great help. Can you let me have it today? Yours very truly, (35)

Dear Madam: Our place of business is a busy one this month. Your money will buy

more here than any other place.<sup>20</sup> Come in and see our goods before it is too late. Yours truly, (35)

Amy: I am in favor of your plan to visit the steel works. It will be a treat to see the men at work. I<sup>20</sup> think Mr. and Mrs. Gates will be happy to go too. Nellie (31)

Mr. James Smith. Dallas, Texas. Dear Sir: You mentioned today that in the morning you would be ready to begin<sup>20</sup> work on the bridge you are going to put in for me. You will have until the first of next month to finish it. I<sup>20</sup> am not overworked, and I may be able to help you soon. Will you let me?

Will you need your pay soon? I can have<sup>20</sup> a check ready for you by the end of the month. Yours truly, (71)

Dear Dad: I have your letter in which you inform me that you have not been feeling well. You mention that you almost<sup>20</sup> always begin the day feeling first-rate and work until the middle of the day, but that then you begin to feel<sup>20</sup> the strain.

If you will forgive me for saying this, Dad, I think you have been overworking. When anyone has reached<sup>20</sup> your age and has labored as you have in your business, he should handle less of the detail work instead of increasing<sup>20</sup> his tasks as you seem to. You have saved your money and you have a big income. Would it not be well for you to<sup>20</sup> cease this work that is overtaxing you and take a trip?

Think this over, Dad. Here's hoping you will agree with me<sup>120</sup> and take a real vacation. With deep affection, Fred (129)

Dear John: As a special favor, will you give me the names of the men employed in your office, so that I may see<sup>20</sup> them about enrolling in my classes?

If they will agree to put in a half-hour of study daily with me,<sup>10</sup> they will be able to express their thoughts more plainly in letters. The knowledge they get will also be of value<sup>20</sup> to them when they have to represent you in public. Jim (70)

Dear Sir: I desire to employ a man with special knowledge of coal to represent us in your city.

This man<sup>20</sup> must be able both to sell coal and to take over our books and other office details. He will be thrown with the<sup>20</sup> officials of other big companies and he must be able to talk to them easily.

You can readily<sup>20</sup> see that it will not be easy to get such a man. Can you give me the name of anyone you think would fit the<sup>20</sup> job?

I ask this because I value your opinion. Yours truly, (91)

Dear Sir: The flour I received from you today is not as good as that you have been sending me. As I will not be<sup>20</sup> able to sell this flour I am going to send it back to you by express collect. Very truly yours (39)

Dear Sir: I agree with you. I should make an immediate complaint too if I received such flour as that you tell<sup>20</sup> about in your letter.

I cannot express the sorrow I feel in receiving such a complaint.

This company<sup>20</sup> has always given value for money received and it is going to keep on giving value. Send the flour back<sup>20</sup> immediately. Half of another lot is already on the train and what remains will reach you Saturday<sup>20</sup> and by express.

This action will represent our complete faith in our flour and the faith you have in this company. Yours<sup>100</sup> very truly, (103)

Dear Sir: "Own your own home" is a well-known slogan. Pick your home and this company will help you own it. Pay a little<sup>20</sup> on it and this company will make you a loan for what remains. The whole plan makes it easy for you. I shall<sup>20</sup> be glad to show you some good homes. Yours very truly, (49)

## A Popular Fallacy

Adapted for Review of the Principles on Completing the Manual

### From an Article by the Union Central Life Insurance Company given in "Gregg Speed Building"

"You have to die to win—that's the trouble with life insurance!" There's a popular fallacy for you! Life insurance<sup>20</sup> is not for the man who dies. It's for the living, himself included. Out of the earnings of his best years, it<sup>20</sup> helps him meet emergencies, such as sickness and old age, as well as providing for his dependents after he<sup>20</sup> has gone.

For example, an old gentleman died in New York not long ago who had \$7,000 in<sup>20</sup> the bank, on which he drew 4 per cent interest, or \$23.33 a month. He had not been<sup>100</sup> ill—there was no obvious clue as to the cause of his death. It was slow starvation. He wasn't a miser, but<sup>120</sup> he didn't want to draw on his principal for living expenses. He was, apparently, afraid he might live<sup>140</sup> too long.

Within three blocks of the old gentleman's room is a life insurance company. That company would have<sup>100</sup> taken his \$7,000 and paid him an annuity of \$60 a month as long as he<sup>120</sup> had lived.

Sixty per cent of all the payments that life insurance companies make go to living policyholders<sup>200</sup>.

Insurance is one of the great business tools. It assures stability to a business by removing the<sup>220</sup> hazards of death and the consequent dissolution of business managements. It is the most important single<sup>240</sup> agency for supplying capital to business. It supplies 22 per cent of the funds used by railroads,<sup>260</sup> 6 per cent of those used by public utilities, 14 per cent of the money for public bonds, and 40<sup>280</sup> per cent of the money for farm and city mortgages.

William Howard Taft, one of our great chief justices of<sup>200</sup> the Supreme Court, had this to say about life insurance:

"Life insurance is a wonderful aid, especially<sup>220</sup> to those of us who are dependent

upon salaries and professional incomes. It is the only way by<sup>140</sup> which we can make our lives happy in the thought that we are putting by something so that those who are dear and near to<sup>150</sup> us may live on after us and not feel pinched when the breadwinner is gone."

William Howard Taft's policy history<sup>160</sup> shows the soundness of his advice.

Such an opinion, you know, represents the final judgment of one of the<sup>160</sup> best brains in the country. It is an opinion based on the experience of millions of his fellow men, brought<sup>170</sup> to his attention daily because of his high position. And to this must be added the weight of his own private<sup>180</sup> experience, for as William Howard Taft advocated in public, so he practiced in the conduct of<sup>190</sup> his personal affairs.

Back in 1900, eight years before his inauguration as President of the<sup>190</sup> United States, Mr. Taft took out a life insurance policy. It was a twenty-payment life policy<sup>200</sup> like hundreds of others issued that year—the typical policy of a typical American.

This contract<sup>210</sup> became paid up in 1919. From then on, though no further premium payments were required,<sup>220</sup> Mr. Taft continued to receive a dividend check each year in increasing amounts.

At Mr. Taft's death, his<sup>230</sup> widow was paid the face of the policy—plus two post-mortem dividends and interest from the very date of<sup>240</sup> his death. And, as is the case with 85 per cent of the claims, the check was issued the same day that proof of death<sup>250</sup> was received at the home office of the company.

This investment of the Chief Justice yielded a gain of<sup>260</sup> 75 per cent. Unusual? Not at all. Thousands upon thousands of life insurance policies show a<sup>270</sup> similar history of profit and protection. (649)

## Faithful Scotch

By ENOS A. MILLS

(Reprinted in shorthand from Riverside Literature Series No. 241 by permission of the publishers, Houghton Mifflin Company)

Adapted for Reading after Chapter VIII  
of the Manual

(Continued from the January issue)

One day a young lady from<sup>180</sup> Michigan came along and wanted to climb Long's Peak all alone, without a guide. I agreed to consent to this if<sup>190</sup> first she would climb one of the lesser peaks unaided, on a stormy day. This the young lady did, and by so doing<sup>200</sup> convinced me that she had a keen sense of direction and an abundance of strength, for the day on which she climbed<sup>210</sup> was a stormy one, and the peak was completely covered with clouds. After this, there was nothing for me to do but<sup>220</sup> allow her to climb Long's Peak alone.

Just as she was starting I thought to help her by sending Scotch with her. He knew<sup>230</sup>

the trail well and would, of course, lead her the right way, if she lost the trail. "Scotch," said I, "go with this young lady, take good<sup>140</sup> care of her, and stay with her until she returns. Don't you desert her." He gave a few barks of satisfaction and<sup>150</sup> started with her up the trail, carrying himself in a manner which showed that he was both honored and pleased. I felt<sup>160</sup> that the strength and alertness of the young lady, when combined with the faithfulness and watchfulness of Scotch, would make<sup>170</sup> the journey a success, so I went about my affairs as usual. When darkness came on that evening, the young<sup>180</sup> lady had not returned.

She climbed swiftly until she reached the rocky moorlands above the timber line. Here she lingered<sup>190</sup> long to enjoy the scenery and the flowers. It was late in the afternoon when she arrived at the summit<sup>200</sup> of the peak. After she had spent a little time there resting and absorbing the beauty of the scene, she started<sup>210</sup> to return. She had not gone far when clouds and darkness came on, and on a slope of slide rock she lost the trail.

Scotch<sup>220</sup> had minded his own affairs and enjoyed himself in his own way all day long. Most of the time he followed her closely,<sup>230</sup> apparently indifferent to what happened, but when she, in the darkness, left the trail and started off in<sup>240</sup> the wrong direction, he at once came forward, and took the lead with an alert air. The way in which he did this should<sup>250</sup> have suggested to the young lady that he knew what he was about, but she did not appreciate this fact. She<sup>260</sup> thought he had become weary and wanted to run away from her, so she called him back. Again she started in the<sup>270</sup> wrong direction; this time Scotch got in front of her and refused to move. She pushed him out of the way. Once more he started<sup>280</sup> off in the right direction, and this time she scolded him and reminded him that his master had told him not<sup>290</sup> to desert her. Scotch dropped his ears and sheepishly fell in behind her and followed meekly along. He had obeyed<sup>300</sup> orders.

After traveling a short distance, the young lady realized that she had lost her way, but it never<sup>310</sup> occurred to her that she had only to trust Scotch and he would lead her directly home. However, she had the good<sup>320</sup> sense to stop where she was, and there, among the crags, by the stained remains of winter's snow, thirteen thousand feet above<sup>330</sup> sea-level, she was to spend the night. The cold wind blew a gale, roaring and booming among the crags, the alpine brooklet<sup>340</sup> turned to ice, while, in the lee of the crag, shivering with cold, hugging shaggy Scotch in her arms, she lay down for<sup>350</sup> the night.

I had given my word not to go in search of her if she failed to return. However, I sent four guides<sup>360</sup> to look for her. They vainly searched among the crags through the dark hours of the windy night. Just at sunrise one of them<sup>370</sup> found her, almost exhausted, but, with slightly frost-bitten fingers, still hugging Scotch in her arms. He gave her food and<sup>380</sup> drink and additional wraps, and without delay started with her down the trail. As soon as

she was taken in charge<sup>1980</sup> by the guide, patient Scotch left her and hurried home. He had saved her life.

Scotch's hair is long and silky, black with a<sup>2000</sup> touch of tawny about the head and a little bar of white on the nose. He has the most expressive and pleasing<sup>2080</sup> dog's face I have ever seen. There is nothing he enjoys so well as to have some one kick the football for him. For<sup>2100</sup> an hour at a time he will chase it and try to get hold of it, giving an occasional eager, happy bark.<sup>2080</sup> He has good eyes, and these, with his willingness to be of service, have occasionally made him useful to me<sup>2080</sup> in finding articles which I, or some one else, had forgotten or lost on the trail. Generally it is<sup>2100</sup> difficult to make him understand just what has been lost or where he is to look for it, but when once he understands,<sup>2120</sup> he keeps up the search, sometimes for hours. He is always faithful in guarding any object that I ask him to take<sup>2140</sup> care of. I have but to throw down a coat and point at it, and he will at once lie down near by, there to remain until<sup>2160</sup> I come to dismiss him. He will allow no one else to touch it. He never fails to convey the impression<sup>2180</sup> that he would die in defense of the thing left with him, but desert it or give it up, never! (2196)

(To be continued next month)

## Lumber Letters

*Typical Letters on The Lumber Industry, from the manuscript by F. N. Haroun, High School of Commerce, Portland, Oregon, for the "Gregg Vocational Dictation" series*

Wind River Lumber Company  
White Salmon

Washington

Gentlemen:

Will you please quote us your lowest net prices<sup>20</sup> on the following, at once:

18 pieces 8-inch 12-ft. Fir creosoted piling  
36 pieces 8-inch<sup>40</sup> 16-ft. ditto  
Balance of car: 3 x 12-12 to 24 ft. No. 1  
Fir Rough Standard Sawn,<sup>20</sup> Creosoted  
Bridge Plank.

Please figure these prices delivered Kimball, Nebraska, which we believe is 51¢<sup>20</sup> fir rate.

In case you do not have the piling, we wish you would turn this inquiry over to some mill that can quote<sup>100</sup> us prices.

We await your reply with interest.

Very truly yours, (113)

Preston Lumber Company  
Lincoln  
Nebraska

Gentlemen:

We are glad to quote you prices on your inquiry<sup>20</sup> of the sixteenth, f.o.b. Kimball, as follows:

Piling 43¢ per lin. ft.  
SS<sup>40</sup> plank \$43 per M

While you gave no creosoting specifications, we have quoted on<sup>60</sup> the 10-lb. pressure treatment. Hope you can give us the business.

What became of the plank order on which we quoted<sup>80</sup> you on July 5? Had hoped you might swing this our way.

Yours very truly, (93)

G. L. Brown Lumber Company  
Little Rock  
Arkansas

Gentlemen:

Today one of our mills listed with us a<sup>20</sup> special car of Dimension which they have on hand, and we thought you might be interested in handling it. A-list<sup>10</sup> of the stock is enclosed. This stock was specially surfaced this week, and is only partially seasoned. It is of<sup>60</sup> fair grain, but there are some pieces in it that are coarse.

It has not been run with eased edges, but we think our mill would<sup>80</sup> be willing to do this if your customer so desires.

We offer this stock, of course, subject to prior sale; so<sup>100</sup> will you kindly communicate with us immediately by wire or air mail in case you find an order to<sup>120</sup> cover.

Yours very truly, (125)

## The Pearl King

From "Capper's Weekly"

Back in 1890, a Japanese peddler of noodles, Kokichi Mikimoto, quit his job of<sup>20</sup> peddling to study the oyster's secret—to learn how oysters could be put to work making perfect pearls. It was not<sup>40</sup> until 1913, 23 years later, that he spread panic in the gem markets of the world with<sup>60</sup> the announcement he had succeeded.

Since then he has had millions of oysters working for him, has made a great fortune<sup>80</sup> and has become the pearl king.

But fears that the pearl market would be flooded and the price of pearls be sent tumbling,<sup>100</sup> have proved unfounded. For you can put an oyster to work, but you cannot make him produce a perfect pearl. For<sup>120</sup> every 100 oysters employed by Mr. Mikimoto, the yield is four or five pearls. Also the mortality<sup>140</sup> rate is high.

It takes four years to grow a pearl. A surgical operation is the first step. Five million<sup>160</sup> oysters are operated on yearly at Mr. Mikimoto's farm. The treated oysters are kept in cages<sup>180</sup> to protect them from devil fish, and three times a year each oyster must be washed.

The largest single pearl grown weighs 19<sup>200</sup> karats and is worth \$6,000. The finest is valued at \$8,500. It is smaller<sup>220</sup> but has great luster.

The pearl king holds patents on his process in America, Asia, and Europe. (239)

## Key to O. G. A. Plate

Chiefly business has taught me to work because of need and not to wait for a rising wind of inspiration. I<sup>20</sup> learned that only in

# Why The Gregg Writer is Popular in the Classroom

## THE PUPIL LIKES IT FOR THE

**"Pleasant-Reading" plates** (illustrated)—designed especially to interest the beginning student in reading shorthand for practice and pleasure. Graded for use after Chapter 8.

**Learner's Department**—exposition of theory supplementing and complementing the teacher's presentation—new ideas—a different slant on the daily assignment.

**"Reading Test" plates**—for homework reading assignments—easily checked—save classroom time for dictation and insure results.

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### THE GREGG WRITER

270 Madison Avenue, New York, N. Y.

B. E. W.

The squares I have checked below indicate what I wish:

- One year subscription to THE GREGG WRITER, for which I enclose \$1.00.
- One free sample copy of THE GREGG WRITER.
- One free copy of THE GREGG WRITER Credentials Booklet.

Name .....

School .....

Street .....

City .....

State .....

long hours, in full and exacting days, may success be won.

One must work when his brain is tired, and<sup>10</sup> not idle for some happier morning to drive his pen. Today is the time, or the poem rots within the brain.<sup>60</sup> A man must stay at his desk and write himself to better humor for his task.

Business teaches this, and were Greenwich<sup>80</sup> Village of a harsher discipline it would dab and trifle less. In art there is no playtime school such as our present<sup>100</sup> whim would lay down to cheat children of stiffer training. (110)

swing is over a longer space at first than toward the last, when it is about to stop,<sup>180</sup> but it goes faster, so that the time of the swing is always equal.

But the real inventors of the clock were<sup>200</sup> probably the Arabs. These children of the desert were great inventors many years ago. An Arab is said to<sup>220</sup> have brought a clock to Europe during the twelfth century.

The first public clock was raised on a tower at Padua<sup>240</sup> in Italy. A famous striking clock was placed on a tower in Bologna in 1356. From<sup>260</sup> Italy the invention was carried to Germany. (270)

## February Talent Teaser

### Spelling "Demons"

(Concluding sentences begun in the January issue)

(26) His prophecy came true. (27) Write "versus" meaning "against." (28) The storm was disastrous. (29) Withhold your opinion. (30) He misspelled the word. (31) The amateur was benefited. (32) His régime was successful. (33) He was sued for breach of contract. (34) He essayed to write the essay. (35) He essayed to assay the ore. (36) Antedate the letter. (37) He was promoted to be field marshal. (38) He was steward of the hotel. (39) He polled a large vote. (40) An antidote was prescribed. (41) The financier was resourceful. (42) The omission of a vowel. (43) A transient caller. (44) A facetious remark. (45) Pursuant to your wishes. (46) The evidence is inadmissible. (47) Your proposal is acceptable. (48) An infallible speller. (49) The weather is changeable. (50) A sensible test.

## Who Invented Clocks?

### From the "Southern Churchman"

If ever you visit London, go to the Kensington Museum, where there is a clock that was made in<sup>20</sup> 1325. It is going still. For more than five centuries it has been kept going. It told the hours long<sup>40</sup> before Columbus came to America. It still measures time, while steam and electricity are moving all<sup>60</sup> around it.

But when it was first made the venerable clock was as much an object of wonder as an airplane. Only<sup>80</sup> kings and rich monasteries could purchase a clock.

There are two kinds of clocks, spring clocks in which the wheels are moved by<sup>100</sup> power from the uncoiling of a coiled spring, and pendulum clocks, which are moved by the gradual falling of a<sup>120</sup> weight, the falling being regulated by the swinging of a pendulum. When a pendulum is set swinging,<sup>140</sup> it makes each swing backward and forward in just the same time until it stops, no matter whether the swing is over<sup>160</sup> a long or a short space. Its

## Final Speed Pointers

### From "Gregg Speed Building"

(Concluded from the January issue)

31. The following speed suggestion was made to a speed class by Isaac S. Dement, a<sup>2640</sup> famous shorthand reporter:

"Speed is not an inspiration; it is the repetition of hard work and adaptability.<sup>2660</sup> Just so long as you are continuously running across new words your speed will be eliminated.<sup>2680</sup> Never allow any notes to go unread that you have written. And while reading them, never let any<sup>2700</sup> incorrect form go uncorrected. Every form difficult of execution should be practiced enough times<sup>2720</sup> to make it docile."

32. By providing a special time for your practice each day, you will be able to do much better<sup>2740</sup> work and more work at this time than at others. You will find yourself more in tune with the spirit of your work. Speed<sup>2760</sup> building will become a habit. As the time for your practice approaches, you will feel eager for it.

33. The mind responds<sup>2780</sup> less readily to speed than the hand because the mind is burdened with many matters and the hand with only<sup>2800</sup> one. While the hand merely writes, the mind has to be wrestling with the problems of hearing, of memory, and of many<sup>2820</sup> other things. The process, which can be made completely automatic, and which, therefore, should be made completely<sup>2840</sup> automatic, is the recalling and writing of outlines, leaving the mind free to concentrate upon the<sup>2860</sup> occasional new word and the difficulty of hearing and understanding the content of the dictation.

34. If<sup>2880</sup> you are having difficulty in developing a substantial increase in speed after a reasonable<sup>2900</sup> amount of persistent practice and dictation, rest assured that you have overlooked a weakness somewhere. Find out<sup>2920</sup> what that weakness is. Study your own peculiarities. Make a critical comparison of your writing<sup>2940</sup> with that of experts and discover where you are at fault. When you have detected those weaknesses that affect your<sup>2960</sup> speed or accuracy, you must overcome them as soon as possible by intelligent practice. The success<sup>2980</sup> of your efforts is merely a question of concentration and constant vigilance. (2991)



# RECOMMENDED

## Equipment Services Supplies

*The products and services listed on this page have been investigated and Business Education World certifies them as represented and recommends them*

### BOOKKEEPING MACHINES

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### CALCULATING MACHINES

**BURROUGHS**, Model 5 05 05 (hand operated): Made by Burroughs Adding Machine Company, Detroit, Michigan (Sales agencies in all principal cities). Used in schools for the teaching of calculating machine operation and the working of commercial arithmetic and bookkeeping problems. More information will be supplied on request. Its price to schools is \$72.

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**F. S. WEBSTER'S MICROMETRIC**: This carbon paper is specially packaged for student's use, three sheets to a pack, wrapped in cellophane, and is sold only by The Gregg Publishing Company. For information or samples address The Gregg Publishing Company, 270 Madison Avenue, New York, N. Y. Price to schools, only 7½ cents the pack.

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**FLEXOGRAPH**: Stencil duplicator made by the Heyer Corporation, 904 W. Jackson Blvd., Chicago, Ill. Aids you in teaching your students how properly to prepare typed, written, and drawn stencils and make copies from them. Very useful for duplicating lesson sheets, tests, and other school work. Write for information. Price, \$18.00.

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### MAILING APPLIANCES

**O. K. LETTER OPENER**, Model 2B: Made by Oakville Co. Division, Scoville Mfg. Co., Waterbury, Conn. Ideal piece of mailing machinery for use in Office Training courses. Write for our free Suggestion to Teachers and further information. Price to schools, \$40.00.

### MAILING ROOM SCALES

**NEW ERA POSTAL SCALE** (1 lb.): Made by Triner Scale Co., Merchandise Mart, Chicago, Ill. Used in U. S. Post Offices. Should be on desk of every teacher of Office Training or Shorthand Dictation. An actual project for every student in figuring mail and parcel post sent free with scale. Send check with order, or specify C.O.D. Price to schools, \$8.50.

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### TRAVEL

**BERMUDA**: Furness Bermuda Line sailings twice weekly. Every cabin with private bath. For information write *Business Education World*, attention of Miss Ulrich, 270 Madison Avenue, New York, N. Y. Round Trip, \$60.00.

## Legal Papers—V

### AGREEMENT of Conditional Sale

(Continued from the January issue)

7. In the event of default<sup>600</sup> in any of the payments, or in the event that the Seller shall engage an attorney to enforce<sup>600</sup> collection, or to preserve and protect its rights under this agreement, the Purchaser agrees to reimburse the<sup>600</sup> Seller for legal expense, which the Seller may incur, not exceeding 15% of the total balance<sup>620</sup> of the purchase price remaining unpaid at the time of default. The Purchaser further agrees to reimburse<sup>640</sup> the Seller for expenses incidental to such suit including the cost of a bond if same becomes necessary,<sup>660</sup> and the Purchaser agrees that the Seller may have judgment for such amount in addition to the<sup>680</sup> amount due on the purchase price or under any other clause of this agreement.

8. The Purchaser agrees to use<sup>700</sup> the heating system with reasonable care and to indemnify the Seller against any damage or<sup>720</sup> physical injury done to the same, ordinary wear and tear excepted, and the Seller, his agents and<sup>740</sup> servants, shall have access at all reasonable times, to said premises, for such purposes as in the Seller's judgment<sup>760</sup> may be necessary.

9. The Purchaser will insure the heating system installed hereunder for its value,<sup>780</sup> for the benefit of both the Seller and the Purchaser as interest may appear. In the event of total<sup>800</sup> or partial loss or destruction of said heating system, the Seller shall have the sole right to collect the<sup>820</sup> insurance or other form of indemnity that may be payable to the Purchaser, by reason of such<sup>840</sup> destruction. The Purchaser shall remain liable to the Seller for any unsatisfied balance of the purchase<sup>860</sup> price. (861)

(To be continued next month)

## Short Stories in Shorthand

### Striving to Please

Diner: Waiter, I'll have pork chops with fried potatoes; and I'll have the chops lean.

Obliging Waiter: Yes, sir. Which way, sir? (20)

### How Annoying!

Young Lady Motorist: It's snowing and sleetling, and I'd like to buy some chains for my tires.

Clerk: I'm sorry, miss, but<sup>20</sup> we keep only groceries.

Aforesaid Motorist: Why, the traffic officer said this was a chain store! (39)

### Vicarious Suffering

"I suffer terribly from dyspepsia."

"Dyspepsia! You don't look as if you had that."

"I haven't. But my<sup>20</sup> boss has." (21)

### From a Small-Town Paper—

Through circumstances not under the owner's control, the sale of Olaf Johnson is postponed. (16)

### Further Advice Wanted

"All my success in life," the leading citizen told the graduating class proudly, "I owe to one thing alone<sup>20</sup>—pluck, pluck, pluck!"

"Yes, sir," came the earnest rejoinder from the back row, breaking the speaker's impressive pause, "But how are<sup>40</sup> we to know the right people to pluck?" (46)

### Doing Double Duty

"Tommy, isn't it rather extravagant to eat both butter and jam on your bread at the same time?"

"Oh, no, mother.<sup>20</sup> It's economy. You see, the same piece of bread does for both." (36)

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